Resource Mobilization: Methodological Guidelines

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1. Introduction

Sub-Saharan African countries are among the world's poorest and most of these countries lag far behind other developing countries in the improvement of health. Home to over 489 million persons, the average per capita income for the sub-Saharan African countries is $350 (1991, excluding South Africa). The average life expectancy in this region is 55 years, which is 11 less than the average for other low income countries like China and India. The median age of death is 5 years, as compared to 37 for India and 64 for China. Infant mortality rates are 55% higher than other low income countries of the world. A large proportion of the population suffers from malaria and tuberculosis, and several countries face a serious threat from AIDS.

At the same time, many sub-Saharan African countries are going through an economic crisis. The average rate of growth of per capita GNP has been -0.6% in 1991, -1.4% in 1990 and 0.5% in 1989. In fact, the average annual growth rate over the entire ten-year period 1980-90 has been negative for many countries. Not unexpectedly, national health expenditures have also been generally low in per capita terms, with national governments spending an average of only $5.

Given Africa's economic crisis and low incomes, many governments are considering new strategies for increasing the overall resource level in the health sector, as well as resources available to support government provided services. These strategies include increased allocations from government revenues, special taxes, user charges, social insurance, and private insurance. Different countries have adopted a different mix of these strategies, and have gone through a variety of different experiences. These experiments have drawn the attention of governments and international donors alike, and widespread interest has been generated in understanding the mechanism and analyzing the results. A large number of studies have been done by different researchers on the different aspects of implementation of these resource mobilization strategies. (See, for instance, Shaw and Griffin, 1995, Creese and Kutzin, 1994, Kutzin, 1993, Vogel, 1993, McPake, 1993, Carrin, 1992, and Griffin, 1988).

This study, sponsored by USAID under the Health and Human Resources Analysis for Africa (HHRAA) project, seeks to provide a systematic review of different experiences with specific resource mobilization strategies in terms of the major objectives of these efforts. The country case studies proposed for the

DDM-HHRAA project will emphasize a country focus in contrast to a method focus. This means that DDM will assess national strategies and experience with generating resources for the health sector, both public and private. Case study countries should be chosen from those which have explicit policy strategies to increase resources for health. Our interest will be in understanding the range of policies and actions used to achieve that objective, in contrast to examining one specific approach to resource mobilization (e.g., user fees, insurance, etc.) in each country. Overall, four general questions will be examined in each case:

- What was the overall impact on health care resources of the strategies adopted?
- What was the relative effect on government and non-government sources of finance?
- Can the contributions of specific resource mobilization strategies be identified?
- What was the effect on resources for public goods and primary health care services, if any?

We anticipate that this country focus will also allow us to answer questions about specific resource mobilization strategies and methods. In particular, the proposed study will examine and assess the resource mobilization strategy or strategies adopted by the country being studied, and will look at:

- reasons for choosing the particular strategy or mix of strategies;
- the different design and implementation mechanisms of the individual strategies;
- the impact of various resource mobilization strategies on the national health system of the country; and
- lessons learned.

The impact of various strategies will be assessed in terms of the various objectives of these efforts. Specifically, the quantitative aspect of the study will focus on the effect on (a) resource mobilization; and (b) sustainability. To the extent possible, the study will also examine the effects on equity, quality of service and patient satisfaction, and private sector development. The overall output of the research will be a set of “guidelines” for national policy-makers and USAID mission advisors which will describe:

- which resource mobilization mechanisms and combinations of mechanisms are feasible;
- the advantages, disadvantages, and trade-offs associated with the

different options;

- key implementation and "process" issues to be considered in order to increase the level of resources available for health and to ensure the sustainability of those resources.

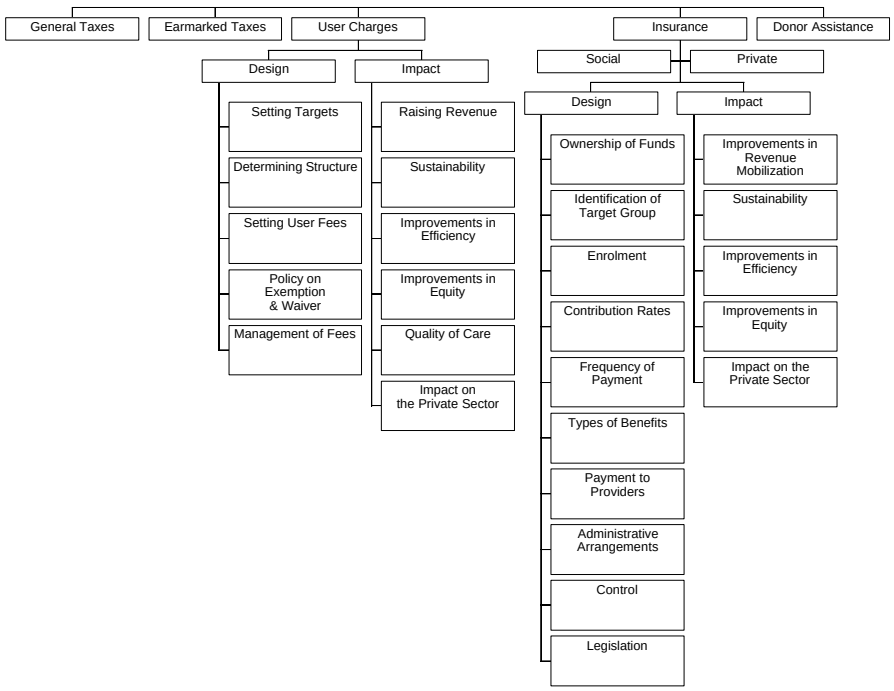
This project would significantly update and expand the documented analysis and will "focus on both the effects of different types of strategies and the implementation issues that must be considered by African decision-makers and USAID program staff to choose appropriate strategies" (Project Proposal, Resource Mobilization, DDM, 1994).

This study will be carried out in five countries, of which three will be in Africa and two outside of Africa. As a first step, field case study guidelines will be developed to standardize the data collection methods, the criteria for evaluation and performance indicators in order to ensure comparability across countries and strategies. This paper is an initial draft of this research protocol.

The rest of the guidelines are organized as follows. In section 2 we briefly look at the various ways which have been adopted by different countries to raise resources for health care. The main strategies used are tax revenues, user charges, and insurance, social and private. These are discussed in sections 3, 4, and 5 respectively. Section 6 contains a set of field guidelines developed on the basis of the preceding sections. A brief account of country experiences and research study is placed in the appendix.

2. Strategies for Resource Mobilization

Figure 1
Resource Mobilization Strategy



Resource mobilization refers to health financing strategies to generate resources to support or pay for the goods and services used in the production and delivery of health care. The major strategies for resource mobilization include[1]:

- increased allocations from general government revenue;
- specially targeted public revenue-raising efforts;
- contributions from private donors, and foreign assistance;
- social health insurance;

1/ "Community financing" is often included in the list of financing strategies. In our framework, community financing is a method for organizing and implementing the strategies mentioned. For example, community financing may include user fees and types of nongovernment insurance, such as a prepaid plan, all under control of a local management committee. Community financing efforts will be included in our studies.

Table 1

Contribution to Recurrent Health Expenditures in Selected Countries, % by Source

Country	*MOH Budget**	*Social Security*	*Foreign Aid*	*Out-of-Pocket*	*Private Insurance*	*Other Private*
Burkina Faso (1981)	47	2.2	25.4	25.4		
Burundi (1986)	36.6	14.1	31	18.3		
Cameroon (1983)	77.5	1.2				21.3
Cote d'Ivoire (1985)	42	0.4		56.8	0.8	
Ethiopia (1986)	32			66	0.2	1.8
Ghana (1987)	29			58		13
Guinea (1983)	70			30		
Kenya (1984)	48	3.8	2.5	41	1.2	3.5
Lesotho (1986)	39			17.4	0.7	42.9
Madagascar (1985)	43		11	34		12
Malawi (1986)	75		18	7		
Mali (1986)	22.8	2.1	3	72.1		
Mozambique (1985)	92.6		7.4			
Niger (1984)	52.2		21.7	26.1		
Nigeria (1985)	49.9			45.3		4.8
Senegal (1981)	43	0.6	16.4	25	15	
Sudan (1986)	21.2			77.6		1.2
Tanzania (1987)	85		15			
Uganda (1988)	25.7			70.1		4.2
Zaire (1986)	4.8			20		75.2
Zambia (1981)	81			15.5		3.5
Zimbabwe (1987)	52.6		11.7	10	16.7	9

* Includes other government ministries, states, and local government budgets as well.

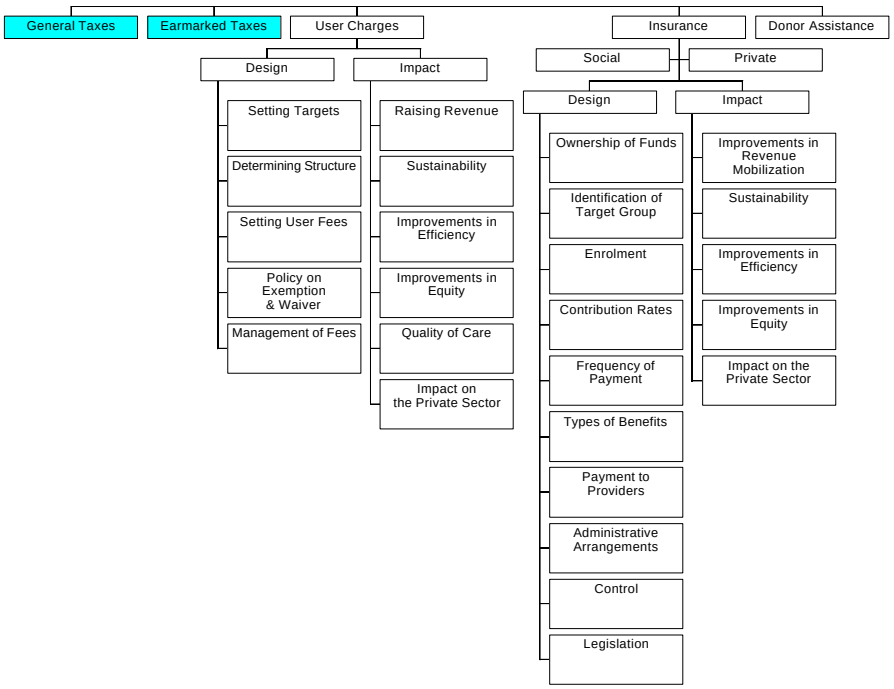
Source: Vogel, 1993

- private health insurance; and
- user fees.

One financing arrangement may be used individually, or several different financing arrangements may be used in combination. While the mix of financing arrangements varies across countries, the general pattern across most sub-Saharan African countries seems to be that government revenue from taxes provide the largest single source of health care finance, followed by out-of-pocket expenses, and finally insurance (table 1).

3. Tax Revenues

Figure 2
Resource Mobilization Strategy
General Taxes



Virtually every country in the world uses general tax revenues to finance various components in the health sector. This tax support ranges from total public financing of all health services to financing of only specific services for specific segments of the population. In most countries with a tax-based health care system, the allocation of funds to the health sector depends on the explicit decisions of the finance ministry, and on the availability of funds. The health ministry competes for funds along with other ministries, and the allocation of funds to the health sector directly affects some other ministry's allocation. Allocation of funds to the health sector is therefore likely to grow and shrink as total tax revenue grows and shrinks.

In most developing countries of the world, government revenue (income tax, capital gains tax, social security, sales taxes, custom duties, and non-tax revenues) has tended to be around 15-20% of total GNP (few exceptions include Egypt, Lesotho and Zimbabwe). In many countries in Africa, notably Kenya, Madagascar and Zambia, government revenue as a percentage of GNP has actually declined over the eleven year period 1980-1991. In some countries, like Cameroon, Côte d'Ivoire, Lesotho, Malawi and Zimbabwe, government revenue as a percentage of total GNP has risen. Overall, the general trends in developing countries seem to indicate that the governments in African countries cannot really expect to raise much more revenue from taxes than they are doing already.

At the same time, government expenditure on health as a percentage of total expenditure of the government has tended to remain low in many countries in sub-Saharan Africa. In some countries government health expenditures have actually fallen (Cameroon, Kenya). In fact, over the ten year period 1975-1985, many countries experienced significant falls in the growth rate of central government expenditure on health, adjusted for purchasing power parity, in terms of US$ in 1980. Table 2, adapted from the World Development Report, 1993 and Vogel (1993), presents revenue and expenditure statistics for selected countries.

Table 2

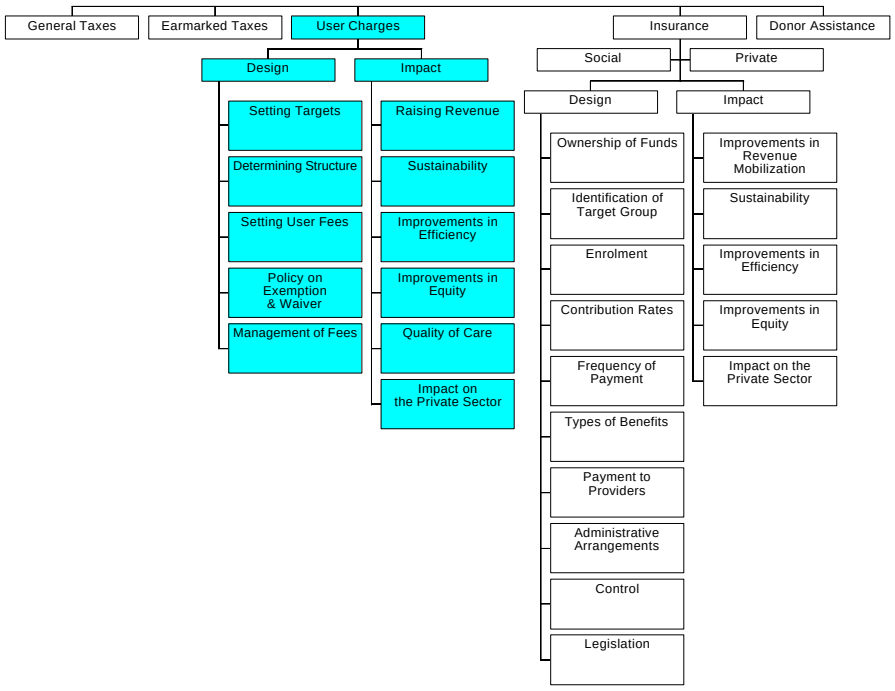
Government Revenue and Expenditure on Health, Selected Countries

Country	*Total Government Revenue (% of GNP)*		*Government Expenditure on Health (% of total expenditure)*		*Growth Rate of Central Government Expenditure (per capita) on Health, 1975-1985*
	1980	*1991*	*1980*	*1991*	
Burkina Faso	13.6		5.8		2.24
Burundi	14.0				6.9
Cameroon	16.2	19.0	5.1	3.4	
Cote d'Ivoire	23.4	26.5	3.9		
Ethiopia	18.7		3.7		
Ghana	6.9		7.0		-8.64
Guinea		14.1			
Kenya	22.6	21.2	7.8	5.4	0.74
Lesotho	17.1	26.8	6.2	11.5	6.08
Madagascar	13.4	9.1		6.6	
Malawi	20.7	23.7	5.5	7.4	3.66
Mali	11.0		3.1		-6.56
Niger	14.7		4.1		-0.52
Nigeria					-9.63
Senegal	24.9		4.7		-2.39
Sudan	14.0		1.4		
Tanzania	17.6		6.0		-3.09
Uganda	3.1		5.1		-4.60
Zaire					-12.11
Zambia	27.0	11.9	6.1		
Zimbabwe	24.4	31.5	5.4	7.6	2.89

Source: Vogel, 1993; World Development Report, 1993.

4. User Charges

Figure 3
Resource Mobilization Strategy
User Charges



Consumers of health care are accustomed to user fees in most countries round the world where the private sector participates in health care provision. However, the prevalence of user charges in public facilities is not so widespread. In fact, in several countries in sub-Saharan Africa there is no user fee system in place at all, while in many others it has only a minimal impact (table 3, based on Shaw and Griffin, 1995).

We first look at the mechanics of design and implementation, and then examine the impact of user fees in terms of different objectives.

Table 3

Experience With User Charges, Selected Countries

Countries with a national system of user charges	***Some national system of user charges, but minimal/ not effective***	***No national system, but some facilities collect user fees***	***No known user fees system***
Benin	Burkina Faso	Central African Republic	Angola
Burundi	Equatorial Guinea	Congo	Botswana
Cameroon	Ethiopia	Madagascar	Malawi
Cote d'Ivoire	Guinea-Bissau	Niger	Sao Tome
The Gambia	Mauritania	Uganda	
Ghana	Nigeria	Zaire	
Guinea	Sierra Leone		
Kenya	Sudan		
Mali	Togo		
Mozambique	Rwanda		
Namibia	Zambia		
Senegal			
Swaziland			

Source: Shaw and Griffin (1995)

Design and Implementation of User Fees

There are several steps in the design of a user-fee system. These include

- setting targets for cost recovery;
- determining the structure of user charges;
- setting user fees;
- policy on exemption and waivers; and
- managing fees collected.

We discuss each in turn.

Targets for Cost Recovery

The level of cost recovery can be set along a 0-greater-than-1 continuum. At one extreme is no cost recovery and all products and services are offered free of charge. At the other extreme is full (or more than full) cost recovery and all

recurrent and capital costs are fully recovered. In between there is a large range of levels of cost recovery which may be set. There are several advantages and disadvantages associated with each level of cost recovery. For instance, the biggest advantage of free care is that it imposes no administrative burden on the provider. However, this advantage is overcome by the disadvantages associated with free care, like lack of revenue, lack of a signaling system to improve allocative efficiency, etc. Similarly, the main advantage of full recovery is that it provides for the required resources for provision of goods and services. The associated disadvantages include the requirement of fees, administration, and accounting, and the possible exclusion of some segments of the population.

One possibility that is often suggested in economic theory is marginal cost pricing. Marginal cost pricing refers to setting prices equal to all incremental costs directly associated with an additional unit of product or services. Interested readers are referred to Jimenez (1987) and McPake(1993) for further details.

Determining Structure of User Fees

There are several ways in which fees can be structured:

- *Fee per visit*. Under this system, the patient pays a single fee each time he visits a facility. This fee may cover consultation charges, clinical services, laboratory services, drugs, etc., in any combination. The main advantage of this system is that accounting is very simple. At the same time, the system of fee per visit is likely to discourage frequent and unnecessary visits by the patient.

- *Fee per episode*. Under this system, the patient pays one fee for each episode of illness irrespective of the number of visits, the number of consultations, the number of tests, and the number of drugs. Once this fee is set, administering it is quite simple. However, the disadvantage is that once the fee is paid, there are no deterrents to the patient's overuse of the system (moral hazard, demand side) and to the provider's undersupply (moral hazard, supply side).

- *Fee per service*. Under this system, the patient pays for each item of treatment received. The biggest advantage of this system is that all expenses of the provider get accounted for. The disadvantages include the greater managerial requirements in billing and collection procedures.

- *Capitation fees*. Under this system, the patient pays a lump sum amount at the beginning of each time period which gives him access to all services for the entire period. The main advantage of this system is its administrative simplicity. The disadvantages include problems of moral

hazard, and the fact that capitation fees do not provide any signals for better allocation of resources.

Perhaps the major issue in selecting a type of user fees, other than its potential in raising funds, is the effect it is likely to have on provider and consumer behavior in health care consumption. This depends greatly on the incentives involved with each type of fee structure, which are closely related with who bears the financial risks and reaps the rewards -- the patient, the provider, or some third party (e.g., the government). Each of the approaches mentioned can be assessed in terms of such incentives and their effects.

Setting Prices

Prices may be determined in a number of ways. These include

- *Market prices*. Under this system, user charges are set equal to market prices, if available. In the absence of market prices, some other criterion will have to be used to set user charges.
- *Actual costs*. Under this system, prices are set equal to actual costs of products and services provided. Costs can be measured as average or marginal costs. Though more difficult to measure than average costs, marginal costs can be approximated by non-salary recurrent costs. The main advantage of this system is that costs get accounted for, though the degree to which costs are recovered depends on whether the user fees recover all costs or only part of the costs. Moreover, once actual costs are known, they can be adjusted up or down for cross subsidies, incentives for use of public goods, etc. The biggest disadvantage of this system is that it is often not easy to allocate joint costs and to compute costs per unit of each product or service provided.
- *Fixed price*. Under this system, user fees are set equal to a fixed price. This price is usually set equal to the ability to pay of the poorest segments of the population. For administrative and political reasons, the same price is offered to all segments of the population. This system of setting fees is most popular, but least effective in terms of its impact on the health system.

Exemptions and Waivers

Regardless of the average ability and willingness to pay in the population, there are always those who are unable to pay all or part of the fees at any price. The design of an effective system of waivers and exemptions entails many steps:

- *Criteria for eligibility*. Those eligible for exemptions from payment of user fees would include the poor, those who are unable to take care of themselves, those suffering from illnesses or needing services that have strong public good characteristics, and perhaps some segments of the population like infants, the aged, those included for "merit" reasons, etc.
- *Criterion Weight*. Having established a criteria, it is necessary to have a scale along which the eligibility of the criteria can be judged. For instance, if one criterion for exemptions is low income level, it is necessary to decide what constitutes a low level of income. Similarly, if illness with strong externalities qualify for exemptions, it is necessary to prepare a list of such illnesses.
- *Extent of exemption*. In a number of cases, it is possible that the patient may be able to pay part of the user fees, but not the full amount. A system of exemptions and waivers may therefore be partial, in that the patients may be required to pay only a percentage of the fees or may be required to pay for only some of the services.
- *Authority to grant waivers*. Clearly, there has to be some designated person in the facility authorized to grant waivers on the basis of the criteria and extent established above.

Management of Revenue Collected

The final step in the designing and implementation of a user fee system is management of the user fees collected. Management of revenue includes all the activities from billing to collection to depositing collected fees to accounting.

- *Billing*. On the basis of the fee structure, the actual price, and the rules and regulations for exemptions and waivers, the amount of fees payable by the patient is decided. This requires that the administrative staff in charge of billing be trained in all the aspects of user fees, and that the fee schedule, if any, be displayed and made available to the patient.
- *Collection*. The process of collection entails the actual collection of cash from the patient, issuing a receipt to the patient, making appropriate entries in the account books, and storing the revenue so collected. This requires availability of trained staff, a secure place to keep money, and a system of receipts, cash books, and account books.
- *Depositing fees*. The fees so collected will need to be deposited for safekeeping either in a bank or some other safe place.
- *Accounting*. The final step in the management of revenue collection of user fees is maintaining accounts of all revenue collected according to

the products and services provided, to the extent possible. An analysis of this will, among other things, permit improvements in the allocation process.

Impact of User Fees on the Health System

The impact of user fees can be analyzed in terms of its effect on revenue mobilization and sustainability, as well as on efficiency, equity, and private sector development. We discuss these briefly.

Raising Revenue

Many countries, notably Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Zambia and Zimbabwe in sub-Saharan Africa, have implemented user fees with the primary objective of revenue mobilization. Other countries that have implemented user fees have done so primarily for different reasons, like improving drug availability. However, user fees have not contributed significantly to government revenues in most countries, though recent evidence suggests that there have been improvements over time.

In fact, in most countries in sub-Saharan Africa user charges have contributed very little to recurrent government expenditure. With the exception of Ethiopia (mid 1980s), Mauritania (1986), and Lesotho (1991-92), user charges have contributed less than 7% of recurrent government expenditure in the health sector.

Table 4 presents the percentage collection of recurrent government health expenditure from user charges. These figures are collected from Shaw and Griffin (1995), Westinghouse (1995), Creese and Kutzin (1994), World Bank (1994, 1990), Barnum and Kutzin (1993), Hecht (1993), McPake (1993), Vogel (1990, 1989, 1980), Collins (1990), Waddington and Enyimayew (1989), Griffin (1988), Danzon (1985), Heller (1982).

It is also useful to look at the contribution of user fees to net revenue generated at different levels of the health system. Table 5, drawn from Shaw and Griffin (1995), compares revenue collection across different facilities in selected countries.

There may be several reasons for both the low contribution of user fees to total recurrent costs as well as the differences in the contribution of user fees to recurrent costs at different levels of the national health system. Some of these are:

- The fees set may be very low compared to the operating costs, for both outpatient services as well as inpatient treatment. In this case, user fees

Table 4

Contribution of User Charges to Recurrent Government Health Expenditure

Country	*Year*	*Percent of Recurrent Gov't Expenditure*
Botswana	1983	2.8
Burkina Faso	1981	0.5
Burundi	1983	4.0
Cote d'Ivoire	1993	7.2
Ethiopia	mid-1980's	15.0-20.0
Ghana	1990-91	5.6
Guinea-Bissau	1988	0.5
Kenya	1993	2.1
Lesotho	1991-92	9.0
Malawi	1983	3.3
Mali	1986	2.7
Mauritania	1986	12.0
Rwanda	1984	7.0
Senegal	1986	4.7
Swaziland	1988-89	4.6
Zimbabwe	1991-92	3.5
Papua New Guinea	1987	3.0
Yemen Arab Republic	1983	3.3
Jamaica	1984	4.0-5.0
Salvador	1990	4
Indonesia	1983	6.2
Malaysia	1975	3.7
Pakistan	1982	2.0
China	1988	36

cannot make a significant contribution to recurrent costs even if the billing and collection procedures are very efficient.

- The recurrent costs of operation may be too high, so that even if the absolute amount of user fees collected is high, its contribution to total recurrent costs appears to be low. In fact, considerable gains are possible if the current levels of costs and waste were reduced (see, for

Table 5

User Charges: Comparison Between Health Centers and Hospitals

Country	*Revenue from user charges as a percent of operating costs of health centers*	*Revenue from user charges as a percent of operating costs of hospitals*
Benin	42-46	
Guinea, 1992	38-49	
Central African Republic, 1992	110-138	26-45
Lesotho, 1991-93	13-22	4.5-5.3
Senegal, 1991	8-35	5-11
China	85	90-97

Source: Shaw and Griffin (1995)

instance, Kutzin, 1993, Bekele and Lewis, 1986). While waste and cost inefficiency can be widespread, they seem to be particularly predominant in procurement, storage, prescription, and user drugs. For instance, it has been estimated (Shaw and Elmendorf, 1993) that only 12% of the total amount spent on drugs actually reaches the patients. Moreover, cost awareness and improvements in cost management can lead to substantial savings (see, for instance, Creese, 1991; Brunet-Jailly, 1991; and McPake, Hanson and Mills, 1992).

- Billing and collection procedures may be poor, leading to losses in revenue (see, for instance, Shaw and Griffin, 1995, Vogel, 1988, and Stinson, 1982).
- Exemption and waiver policies are not carefully drawn up and strictly enforced (Shaw and Griffin, 1995, Day, 1992, Ellis, 1987).
- Consumers of health care are either unable to pay or unwilling to pay, or both. Consider the case where patients are willing to pay, but do not have sufficient money to do so. Evidence on this is not very conclusive. Some studies (see Forsberg, 1993) show evidence that only a few families do not seek care because of lack of funds (Zambia is a case in point, where 4% of the families did not seek care because of inability to do so). On the other hand, some studies show that the costs of medical care actually deter the poor families from seeking such care. (Gertler and van der Gaag, 1990, for instance, found a significant relationship between price elasticity of demand and income in Peru and Cote d'Ivoire. In cases where consumers have the ability to pay, utilization may drop in the event of implementation of user charges if demand for

health care is price elastic, or if the patients are unwilling to pay. Several studies of price elasticity show that prices have little impact on, for instance, usage of outpatient services (Heller, 1982, Gertler et al, 1986, Griffin, 1988). Willingness to pay can be increased by improvements in quality, as is borne out of studies in many countries, like the Central African Republic (Weaver et al, 1993), Tanzania (Mujinja and Mabala, 1992), and Kenya (Mwabu and Mwangi, 1986, and Mwabu, 1984).

Sustainability

User fees have the potential of improving sustainability of the health system. Sustainability refers to the financial and institutional characteristics of a country to sustain a project over time. In the context of user fees, sustainability depends on the contribution of user fees to revenue and costs associated with its implementation, as well as on the institutional capability it develops and sustains. (Interested readers are referred to Kutzin, 1993, for a detailed discussion of sustainability in health care in developing countries).

As far as contributions to revenue are concerned, user fees improve sustainability to the extent they have the potential to contribute to net revenue. Contributions to net revenue can be sustained over time if :

- the costs of billing and collection are contained;
- there is no substantial fall in the utilization of health services; and
- user fees are periodically adjusted to take into account inflation and changes in costs.

As far as sustainability of the health system is concerned, user fees have the potential to improve sustainability in a number of ways:

- Revenue contribution of user fees may reduce the government's burden of financing the health system. This may free up government resources for use elsewhere.
- The system of user fees can potentially lead to the development of a system of accountability, reporting, and responsible management, since the process of billing and collection will require trained personnel, bookkeeping, and accounting. Further, if the revenue collected from user fees is allowed to be retained at the point of collection, the unit management's control over budgeting and expenditures is strengthened. This has the potential benefit of making the unit management more responsible.

- To the extent that user fees have the potential of improving allocative efficiency, sustainability of the health system improves.

Shaw and Griffin (1995) give some instances of the impact of user fees on sustainability. According to them, many countries, like Benin, Botswana, Burundi, Ghana, Guinea, Lesotho, Mali, Nigeria, Tanzania, Zaire and Zimbabwe, are advocating decentralization of health systems, and shifting controls from central authorities to regional and district bodies, and fee collection and retention at the point of collection is likely to give some control over money to the decentralized units, which may improve institutional sustainability. Moreover, as Shaw and Griffin (1995) maintain, the ability to collect and retain fees at local centers can also improve supply of drugs. Many countries, like Benin, Cameroon, the Central African Republic, Chad, Liberia, Mali, Niger, Nigeria, Senegal, Sudan, Tanzania and Zaire, have drug-revolving funds. Most of these funds recover drug costs with revenues from drug fees and user charges, and this ensures sustained availability of drugs in the health centers.

Improvements in Efficiency

User fees have the potential to bring about improvements in allocative efficiency in at least two ways. First, the introduction of prices sets in motion a system of signalling the value of the product, as perceived by the consumer and as perceived by the supplier. User fees provide good price-signals to inform clients about priorities in the health system, and make them aware of costs when they use the health system. User fees provide suppliers of health care with good signals of what services are being demanded, and how much is being demanded. Of course, for this demand and supply system to work effectively, user fees have to be set such that the consumers' demand functions and providers' supply functions reflect the market conditions as closely as possible. The actual improvements in efficiency, however, would depend on the extent to which the signals sent to consumers, providers and policy-makers lead to desired changes in behavior of these agents. User fees will clearly affect consumer behavior, since user fees will increase a patient's out-of-pocket expenses and change his demand patterns, though the extent of change would depend on factors like consumer-perceived quality of care, the price elasticity of demand, and cross-price elasticity of alternative forms of medical care. The effect of user fees on behavior of providers and policy-makers is not so clear. On its own, "higher fees do not automatically create better investment decisions, management control, allocation decisions, and quality" (Griffin, 1988). There might not be sufficient incentives for public providers and policy-makers to respond to signals generated by user fees, as would perhaps be in a private, competitive environment. User fees must therefore be accompanied by changes in provider and policy-maker behavior, or else the consumer will end up paying for the same services that were previously available to him at no charge.

Second, in absence of user fees, allocation of medical care is effectively decided by travel time and waiting time (queue), and several economic inefficiencies are associated with this kind of allocation mechanism. First, this "time-price" can neither be traded, borrowed, nor stored. Second, while the consumers of health care are paying something (time) to purchase health care, the providers are not getting or losing anything. And finally, waiting times are not very good at differentiating among severity of needs. User charges improve the efficiency of health services because they have the potential to eliminate these economic deficiencies associated with the waiting time allocation system.

Improvements in Equity

Following Wagstaff and van Doorslaer (1993), equity can be defined in terms of finance and delivery of health care. Equity in the finance of health care refers to the requirement that "persons or families of unequal ability to pay make appropriately dissimilar payments" for health care (vertical equity), and the requirement that "persons or families with the same ability to pay make the same contribution" (horizontal equity). Equity in the delivery of health care refers to the requirement that "persons in unequal need be treated in an appropriately dissimilar way" (vertical equity), and the requirement that "persons in equal need be treated equally" (horizontal equity). (All quotes are taken from Wagstaff and van Doorslaer, 1993).

The general opinion about fees is that they reduce equity, since they impose a burden on those least able to pay. According to this thinking, user charges do not improve equity in finance if the same amount is required to be paid by everybody. Further, there are few or no gains in equity in delivery of health care with imposition of user fees, since a free care system itself is fairly equitable.

On the other hand, there are counter arguments that fees actually improve equity. It is argued that a free care system is not equitable, since persons with better connections, better knowledge of the system, etc. get more attention, and possibly superior care. In the absence of fees, contacts and position are used to direct demand and allocate supply. Further, equity in finance can be improved if an appropriate system of waivers and exemptions is in place. In this event those unable to pay can be exempted from user charges, while those who have the ability to pay actually do so.

The impact of user fees on equity is thus not so clear. In fact, different countries are likely to have very different experiences in this regard, and a host of factors like education levels, social systems, etc. are likely to play significant roles in determining the net effect on equity.

Quality of Care

Implementation of user fees may bring about a positive change in quality of health care, more so if the revenue so generated is reinvested in the facilities. Several recent studies suggest that such reinvestment can significantly counterbalance any negative effects of fee increases, such as reduced utilization (see, for example, Denton and Over, 1991, and Litvack and Bodart, 1993).

Quality of care can be defined in a number of different ways, and it is useful to take into account the multidimensional aspects of quality. The issue is further confounded by the different perceptions that patients and providers tend to have about what constitutes quality of care.

Maxwell (1984, 1992) suggests six different dimensions along which quality of care may be judged: effectiveness, acceptability, efficiency, access, equity, and relevance. Donabedian (1980) looks at quality in terms of structure, process, and outcome. Combining the two approaches gives one way of defining quality (Maxwell, 1992). An illustrative matrix is presented in table 6. This way of defining and assessing quality highlights many important elements which are seen differently by the various agents involved: patients, providers, governments, etc. and include physical facilities, organization and management, patient complaints, patient satisfaction, diagnostic activity, health outcome indicators, etc.

Impact on the Private Sector

With the tightening of health budgets, increasing costs, aging populations, and increasing awareness and demand for health services, many countries are giving increasing attention to private sector involvement in health care production, delivery and finance. Moreover, the private sector is thought to be more responsive to market incentives, and probably more efficient than the public sector.

However, a system of free care may be an impediment to the development of the private sector. Unless differences in quality are vastly significant, patients will tend to prefer free government care to comparatively expensive private care. Implementation of user fees in government facilities can potentially affect the private sector in a variety of ways:

- User fees in government facilities will probably increase the use of non-government providers, through cross-price effects.
- As noted above, appropriate reinvestment can improve government services, providing real quality competition for private providers.

Table 6

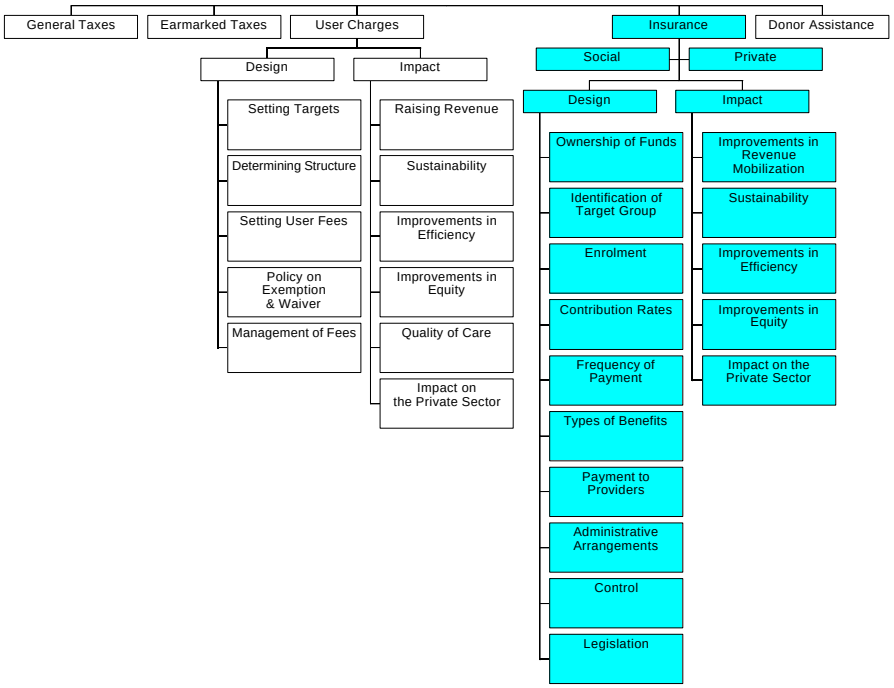
Quality of Care

	Structure	***Process***	***Outcome***
Effectiveness	facilities, equipment, administrative processes, qualifications of medical staff, etc.	clinical history, physical examination, diagnostic tests, technical competence, preventive management, continuity of care, etc.	patient recovery, restoration of function, survival, etc.
Acceptability	physical comforts, cleanliness, privacy, counselling, etc.	explanation of treatment, patient education, etc.	follow up for improvement, meetings, etc.
Efficiency	appropriate staffing and equipment levels, etc.	administration, organization, staffing, operational arrangements, etc.	comparison of costs for similar cases across different units and time periods
Access	location, etc.	capacity, etc.	treatment of wait-listed patients, etc.
Equity		bias in treatment, etc.	bias in outcomes, etc.
Relevance	usefulness of resources, need for specific services, etc.		impact on health status for different groups of people, etc.

- With comparable quality, public sector prices can provide real price competition for private providers, holding down private prices.
- The presence of user fees may motivate households to spread over time the risk of high health expenditure, which may lead to the development of insurance in health sector.

5. Health Insurance

Figure 4
Resource Mobilization Strategy
Insurance



Illness and injuries befall people quite randomly. This creates a health risk that in turn creates a financial risk as people seek medical care to alleviate the effects of illness. Health insurance protects people from this financial risk when they fall ill. Health insurance collects financial contributions from many people that are made whether the person is ill or not. These contributions are pooled together and used to cover expenses of those who experience catastrophic events. Health insurance is therefore a mechanism of spreading risk over time as well across many people.

Health insurance is of increasing interest as a means to generate resources for health care, as well as for its potential to improve the supply and provision of

health services. However, experience to date in developing countries is limited, especially in the lower income developing countries (China was a striking exception to this, although rates of coverage have declined substantially in the 1980s). Available evidence indicates that only a small percentage of the population in sub-Saharan Africa has any kind of health insurance (table 7). Health insurance in the lower income countries has been mainly government or employer provided, with limited coverage. Private insurance is not very common.

Health insurance is characterized by a group of persons who contribute funds to a common pool, usually held by a third party. These funds are then used to pay for the health care costs of the members of the pool. This third party can either be a governmental social security, a public insurance fund pool, employer-sponsored pool, or a private insurance fund pool. Depending upon who owns the third party fund pool, insurance can be categorized as "government" or "private". The term "government" in describing insurance needs some qualification. Social insurance may be organized by government, but be implemented by a variety of quasi-public organizations. It is probably best in analysis to separate these funds from the direct government provision of health care (for example, through the MOH). Insurance plans may be further characterized by groups covered, type of management, size of the group (number of enrollees), services covered (inpatient care, outpatient care, preventive care, drugs, etc.), annual premium, copayments, deductibles, restrictions on use (like requirement of referrals), etc.

Government sponsored health insurance may be operated through national security funds. Social security systems consist of funds contributed by certain social classes for a specified set of health and welfare benefits. Based on the principle of social solidarity, the concept of social security insurance refers to defining medical care as a social rather than a private risk. Total contributions to the social fund should be determined actuarially, but individual contributions need not be. To this extent, therefore, social insurance may lead to a cross-subsidization from the haves to the have-nots, and from those with a lower incidence of illness to those with a higher incidence of illness. Borne out of public policy, legislation decides who all are covered, what the benefits are, and what the premium contributions are. Premium contributions are usually payroll tax, and mostly formal sector employers and employees participate in these funds. Benefits under social insurance may form a type of "social contract" with members that can be very difficult to change.

Another significant type of government sponsored insurance arrangement is community, or cooperative, financing. Community sponsored plans and cooperative based programs are characterized by a group of individuals, like in a cooperative, who identify projects which have strong public goods characteristics, and establish a mode of mobilizing resources toward meeting the objectives of the program. Established by the common will of the people rather than the market forces, these programs permit a variety of resource mobilization

Table 7

Profile of Health Insurance Coverage in Some Developing Countries

Country	*Type of Insurance*	*Groups Covered*	*Population Covered*
Burkina Faso	Social Insurance	Formal Sector Employees	<1%
Burundi	"Mutuelle" Insurance	Public Servants	10-15%
Cameroon	Social Insurance	Employees	
Chile	National Health Service Scheme; National Health Fund; Armed Forces; Police	NHSS: Open NHF: Formal Sector AF: Armed Forces P: Police only	NHSS: 70% NHF: 25% AF&P: 5%
China	Government Employee Insurance; Labor Insurance; Private Insurance; Collective Insurance; Rural Cooperative Insurance; Commune Insurance	GEIS: Government employees; party members. LIS: all state-owned and collective employees Private: open CIS: open RCIS: open to rural population	GEIS: 2% (1986) LIS: 15% (1987) Private: 12% (1989) CIS: 9% (1981) RCIS: 48% (1979); 20% (1984)
Costa Rica	Social Security	Excluded self-employed, businesses, rural workers	83.7%
Cote d'Ivoire	Social Insurance; Mutuelle; Private Insurance	Employees	
Dominican Republic	Social Security; HMO	Social Security enrollment open; HMO (SEMMA) open to Dominican Teachers Union members only	
Ecuador	Social Security	Open to members of local organizations, like cooperatives, community groups, etc.	17%
Ethiopia	Private Insurance		<1%
Guinea-Bissau	Community Health Insurance		
Kenya	National Health Insurance Fund; Harambee Movement Funds; Private Insurance; Rural-Based Prepayment Schemes	NHIF: Compulsory, for all employees earning > Ksh 1000; HMF: Voluntary Private: Employment based; govt. parastatals and private companies; Rural: Coffee cooperatives	NHIF: approx. 25%
Lesotho		Employees	
Mali	Social Insurance; Company Insurance	Employees	3% approx.
Namibia	Social Insurance; Private Insurance	Employees and families	20% of formal labor force
Nigeria	Private Insurance		<1%
Panama	Social Security	Open	55%
Philippine	National Health Insurance Medicare Program	Employed/self -employed with income >1800 pesos	38%
Senegal	Civil Service Employers; Private Insurance	Employees	13%
Tanzania	Private Insurance		1%
Thailand	Social Insurance; Government Health Cards	Open	
Uruguay	Social Security; Private Insurance	Open	88%
Zaire	Employer-Provided; Rural Insurance	Employees	
Zambia	State Mining Company	Employees and families	6%
Zimbabwe	Private Insurance		5%

Source: Vogel (1993), Mwabu, Wangombe, Ikiara, Manundu, and Kiugu (1993), La Forgia and Griffin (1993).

methods, such as payment in cash or kind, payment in part or full, payment in the form of labor contribution, idle land, etc. This flexibility in the community sponsored plans has been useful in limiting the effects of seasonal income fluctuations on access to care in some countries in sub-Saharan Africa. In Zaire, for instance, the annual collections for a prepayment scheme for hospital services are made during a season where cash incomes are the highest. Similarly, in Guinea Bissau annual collections are made just after harvest. (La Forgia and Griffin, 1993, Mwabu, 1990).

Another form of insurance coverage is employer-sponsored insurance coverage. Under this system the employer provides health care to the employees and their families through either employer owned or employer contracted providers. There are several examples of employer provided insurance coverage in sub-Saharan Africa. In Zambia, for instance, the state mining company provides care to all employees and families in clinics run by the company. In Nigeria, five parastatals provide health coverage for their employees and families in their own clinics as well as by contracting outside facilities (Vogel, 1993, The World Bank, 1994, Shaw and Griffin, 1995).

Health insurance coverage is also provided by private ownership of the third-party pool. In private for-profit insurance schemes the individual premiums are determined actuarially, and administrative costs are recovered through an additional loading on the actuarially-determined premium. Private insurance is not very common in many developing countries. In sub-Saharan Africa private insurance is limited to Cote d'Ivoire, Ghana, Senegal, Zimbabwe, Rwanda, Nigeria, Kenya, and Swaziland. The share of private insurance in total insurance ranges from zero in most countries of Africa to 16.5 in Zimbabwe (Vogel, 1993, The World Bank, 1994).

We first look at the mechanics of design and implementation of insurance schemes, and then examine the impact of insurance in terms of different objectives.

Design and Implementation of Insurance System

There are several steps in the design of an insurance system. These include

- ownership of funds;
- identification of the target group;
- enrolment: mandatory or optional;
- contribution rates;
- frequency of payment;

- types of benefits;
- payment to providers;
- administrative arrangements;
- strategies to minimize losses from insurance; and
- legislation.

We discuss each of these in turn.

Ownership of funds

Health insurance systems are distinguished by, among other things, the ownership of funds. As discussed earlier, insurance funds may be owned by

- Government (Burkina Faso, Burundi, Cote d'Ivoire, Kenya, Mali, and Senegal)
- Public bodies
- Employers (Zambia and Nigeria)
- Non-government not-for-profit organizations
- Private for-profit organizations (Rwanda, Cote d'Ivoire, Ghana, Zimbabwe)

Identification of target groups

Another distinguishing feature of health insurance schemes is the different segments of the population targeted by the scheme. These include

- The entire population (tax based social insurance schemes)
- Employees (government insurance for public employees, and employer based insurance)
- Self-employed (government insurance and community plans)
- Members of a cooperative (community and cooperative based programs)
- Special demographic or socio-economic groups (government schemes targeting the poor, the elderly, the infants, etc.)

Enrollment

- Optional (private insurance)
- Compulsory (some forms of social insurance, and employer based insurance)

Contribution Rates

- Total funds determined actuarially; individual contributions based on ability to pay, as in government social security schemes, social insurance, not-for-profit private insurance, employer based insurance, community insurance.
- Individual contributions determined actuarially, as in private insurance.

Frequency of Payment

- Each pay check, as in some forms of government insurance, employer based insurance.
- Monthly, as in private insurance.
- Seasonally, as in some community and cooperative based plans.

Benefits Covered

Different insurance schemes in different countries have different benefits packages that the insurance schemes offer to the members. The benefits offered would depend on a host of factors, including types of illness, cause of illness, length of illness, epidemiological profile of the community, burden of disease profile of the community, income, premium contributions, cost-effectiveness of delivery, etc. The benefits offered may include all or some of the following:

- immunization and vaccination
- preventive care
- curative care
- dentistry
- drugs and tests
- family planning needs
- ambulance services

Payment to Providers

Different insurance schemes may have different ways of reimbursing the provider. Reimbursement systems have an impact on both the quantity of services provided as well as the prices charged for the service. Provider reimbursement should provide the necessary incentives to the provider to supply products and services of "good" quality, as well as provide incentives to ensure that unnecessary provision and waste is minimized. There are several different ways of reimbursing the provider that have been experimented with in different countries. These include:

- *Consumer pays and claims reimbursement*. Under this system, the consumer pays for health care, and claims reimbursement according to set schedules and price lists.
- *Fee for service*. In this system, the provider has a price list, and is reimbursed according to services provided and prices listed, and according to the terms and conditions of the insurance, i.e., copayments, deductibles, ceilings, etc.
- *Fee for episode*. In this system, the provider has a fee per episode schedule, and is reimbursed according to the type of service provided and the schedule price and according to the terms and conditions of the insurance, i.e., copayments, deductibles, ceilings, etc.
- *Fee for visit*. In this system, the provider is reimbursed according to a set fee per visit and according to the terms and conditions of the insurance, i.e., copayments, deductibles, ceilings, etc.
- *Capitation Payments*. In this system, the provider is paid a lumpsum per patient per year irrespective of the services provided.
- *Reimbursement for drugs*. In this system, the cost of drugs is reimbursed according to a price list, and according to the terms and conditions of the insurance regarding generic/non-generic drug use.
- *Salaries*. Under this system, the provider is a salaried employee of the fund, and provides services to members of the fund.

Administrative Setup

Administrative setup varies with the type of insurance and the population covered. However, the administrative requirements would at least include:

- establishing fee schedules, price lists, etc.;
- establishing premiums and contributions;

- establishing copayments, deductibles, ceilings, etc.;
- registering members and maintaining record of individual members;
- billing and collection, for premiums as well as for other charges in the use of services, like copayments, etc.;
- advising members about entitlement and procedures for claims;
- processing claims;
- reimbursing providers in accordance with the established agreements;
- maintaining accounts, records, statistical updates, etc.;
- periodic training.

Strategies to Minimize Losses

One potential disadvantage associated with an insurance system is cost escalation. Cost escalation may be due to over-utilization and/or over-prescription. There are several ways in which the problems of over-utilization can potentially be addressed. These include:

- *Copayments*. A system of copayments ensures that the consumer faces some costs for the medical services utilized. In theory, it is argued that the presence of costs ensures that over-utilization is minimized. Copayments may be in the form of a flat rate per visit, or a percentage payment.
- *Deductibles*. A system of deductibles ensures that the consumer bears the initial part cost of treatment. In theory, it is argued that the presence of deductibles prevents the consumer from seeking medical care for minor ailments.
- *Ceilings*. A system of ceilings puts a limit on the total benefit package available.
- *Referral Requirements*. The system of referral requirements ensures that the patients point of first contact is the primary care physician, where the services provided are relatively less expensive.
- *Reinsurance of large risks*.

Legislation

For the system of insurance to function effectively, an appropriate legislation has to be in place. Laws and legislation will be required to cover several issues,

such as:

- eligibility
- coverage
- premiums and contributions
- benefits
- reimbursements to providers and consumers
- enforcement of contracts

Impact of Insurance on the Health System

Health insurance is essentially a risk-pooling mechanism, and the main objective of health insurance is to protect people from the financial risk of seeking medical care when they fall ill. Nonetheless, health insurance has significant implications for revenue mobilization, sustainability, efficiency, equity, quality of care, and private sector development. We discuss these in turn.

Improvements in Revenue Mobilization

Compared to tax based revenues and user fees, insurance mechanisms have a greater potential to contribute to revenue collection. First, insurance usually involves the mandatory contribution of new funds (especially employer's contribution) as well as some mandatory contribution of some funds that are probably just moved from private to public (especially worker's contributions). Second, in many developing countries tax avoidance is high; whereas since the insurance contributions are an "earmarked" contribution, kept separate and tied to specific benefits, compliance may be higher even where general tax compliance is not very good. Third, consumers of health care may often not have readily available funds to pay user charges. Fourth, since for most consumers of health care in developing countries the ability to pay is low in times of illness, people would find it easier to make small contributions at periodic intervals than large contributions at the time of illness. Fifth, members of an insurance pool may be able to choose to pay when they are more able to, like harvest time, than when they are less able to, like illness time. In Zaire, for instance, the annual collections for a prepayment scheme for hospital services are made during a season where cash incomes are the highest. Similarly, in Guinea Bissau annual collections are made just after harvest. In both of these countries insurance has been widely accepted.

Sustainability

Insurance mechanisms have the potential of improving sustainability of the health system. Sustainability in the context of insurance depends on the contribution insurance mechanisms can make to net revenue as well as to the institutional capability that can be developed and sustained. (Also see section 4 for a discussion of impact of user charges on sustainability in health care in developing countries).

As far as contributions to revenue are concerned, insurance mechanisms improve sustainability to the extent they have the potential to contribute to net revenue. As discussed earlier, insurance mechanisms can potentially make larger contributions to total revenue as compared to tax based or user fee systems. However, contributions to net revenue can be sustained over time if:

- the administrative costs of management of insurance systems can be contained. Management of an insurance system entails receiving premiums, paying providers, maintaining individual member as well as provider accounts, etc. Indeed, the level of administrative costs will depend on a host of factors, like who all are covered, whether all members pay the same premium, whether these premiums are paid at different times, the manner in which the providers are reimbursed, costs of credit, etc.;
- there is no decline in quality of service. In certain payment systems, like capitation payment systems, providers may have a tendency to supply lower-than-optimal quality services;
- individual contributions are periodically adjusted to take into account inflation and changes in costs. (We note, however, that since wage based contributions are usually in percentage terms, they tend to be automatically indexed to inflation).

As far as sustainability of the health system is concerned, insurance systems have the potential to improve sustainability in a number of ways:

- Increased revenue contribution may reduce the government's burden of financing the health system. This may free up government resources for use elsewhere.
- Management of insurance systems entails a complex system of billing and collection, accounting, bookkeeping, maintaining individual records, keeping detailed accounts of various charges, etc. This is likely to lead to the development of a group of trained accountants and professionals, which is likely to lead over time to better management of the health system.

- Insurance mechanism has significant implications for equity and efficiency, which contribute to sustainability of the health system over time.
- To the extent that insurance systems can lead to growth of the private sector, sustainability of the system improves as the pressures on government budgets decrease.

Improvements in Efficiency

Health insurance can lead to improvements in economic and social efficiency. Most purchasers of insurance are risk averse, and are therefore willing to pay for risk coverage. Provision of risk coverage, therefore, is an efficient use of scarce resources (Akin et al, 1987). Further, the insurance system can potentially encourage providers to contain costs, and the consumers to make least cost choices of type and sources of health care. These represent the economic efficiency objective.

Health insurance can potentially improve social welfare by setting in place a mechanism for spreading costs over the unwell and the healthy. Moreover, insurance mechanisms can be designed to permit income redistribution in favor of the poor. These represent the social efficiency objective.

However, the welfare-enhancing potential of insurance can be reduced by several risks which are associated with third party insurance. These risks are well documented in the U.S. experience. First, introduction of third party insurance may lead to an increase in the utilization of health services. When the unit price of health care is very low, there will be a tendency among consumers to overuse health care. This has the potential of increasing costs. This refers to the problem of demand-side moral hazard. However, moral hazard might not be that serious in countries of sub-Saharan Africa, where time and travel costs may act as a deterrent to overuse (Mwabu, 1990). Second, the introduction of insurance may lead to an increase in the supply of services, for in certain payment systems (like fee per service) providers face incentives to over supply services. This also has the potential of increasing costs. This refers to the problem of supply-side moral hazard. Third, insurance systems can face significant cost overrun risks and have a negative impact on welfare if risks are not spread across broad segments of the population. This may happen if only the unwell seek insurance (demand side adverse selection) and/or the unwell are not encouraged to participate in the insurance plan (supply side adverse selection).

Improvements in Equity

Equity is defined in terms of equity in finance of health care and equity in delivery of health care, in the same manner as in section 4. Insurance, whether it be social insurance or private insurance, has a direct equity-enhancing impact. Within the risk pool, i.e., the group of persons who have insurance, the system of insurance takes care of equity in terms of delivery of health care. Benefits are provided on the basis of need rather than on the basis of income. Therefore, insurance systems have the potential to ensure both vertical equity (persons in unequal need be treated in an appropriately dissimilar way) and horizontal equity (persons in equal need be treated equally).

The impact of insurance system on equity in the finance of health care is less clear. Clearly, tax-based insurance can be designed in a manner that ensures vertical equity (persons or families of unequal ability to pay make appropriately dissimilar payments) and horizontal equity (persons or families with the same ability to pay make the same contribution). Private insurance by itself, however, would not foster vertical equity in finance, since all participants in the insurance program will face an actuarially determined premium, which would not be based on income. Horizontal equity can be expected to be ensured if other factors, like group size, are not too dissimilar.

However, in the short to medium term during which widespread national-level insurance is unlikely to be feasible, the relevant policy questions for national governments concern whether to introduce insurance for particular groups such as formal sector employees. Concerns about the equity implications of such a strategy revolve around whether this would lead to increased inequality of access because of the capture of government subsidy by middle and high income groups, as well as capture of access through demand side moral hazard. In this situation of "partial insurance", equity may in fact be increased in several ways:

- the insured switch to private providers, or if they remain in the public sector, charges recover at least the full cost of services;
- the amount of freed government funds exceed the amount of insurance subsidy;
- these freed resources are targeted to the poor.

Impact on the Private Sector

There is not much evidence of the impact of insurance on private sector development. Theoretically, it can be argued that in the same way as the consumer faces catastrophic expenses in the event of an illness or injury, the provider also risks a catastrophe if treatment provided is not paid for. By

ensuring that risks to consumers are covered, insurance also ensures that the provider gets some or all reimbursement. And if payments to private providers are covered, insurance systems can potentially lead to development of the private sector.

While no conclusive evidence of insurance leading to the development of the private sector exists, there are several examples that illustrate the relationship between the development of insurance and the development of the private sector. Philippines instituted a national health insurance program in 1972 that covers almost half the population. In spite of decreasing coverage and benefits, the number of private hospitals and beds went up almost two times between 1972 and 1990, and provide almost half of all available beds. In fact, in 1983, private hospitals and beds accounted for significantly more than half the total beds available, including all government hospitals and beds. On the other hand, private hospitals and beds have not grown significantly in countries like Tanzania and Uganda, where no financial risk-sharing system is in place. In Tanzania, private hospitals account for less than 2% of all hospitals, beds 1% of all beds, health centers 0.2% of all health centers, and dispensaries 0.1% of all dispensaries (1991). Primary hospitals in Uganda account for 14% of all primary hospitals and outpatient clinics 26% of all outpatient clinics (1991). Uganda has no for-profit private secondary and tertiary hospitals.

6. Guidelines for the DDM/HHRAA Field Case Studies

Different countries are experimenting with different revenue mobilization strategies. These include increasing government allocation to health from general government revenue, user charges at government facilities, social health insurance, encouraging private health insurance, and introducing special revenue raising programs for the health sector. A large number of studies by different researchers have examined many aspects of implementation and results of these experiments. These studies vary in their objectives, emphasis, research methodology, quality and coverage of data, identification of critical variables used in the analysis, and interpretation of results. The main focus of this HHRAA project is to update and expand the analysis in these studies, with a focus on both the effects of different types of resource mobilization strategies and the implementation issues that must be considered by decision makers and the USAID program staff to choose appropriate strategies. A set of five country case studies will be carried out. Three of the potential host countries will be selected from sub-Saharan Africa, while two will be selected outside of Africa. These case studies will examine in detail the impact of health care financing systems on resource mobilization, equity, service quality and effectiveness, and administrative feasibility. Based on these case studies an assessment and implementation manual will be developed addressing the necessary preconditions for implementing different strategies and the strengths and weaknesses of different approaches as learned from recent implementation experience.

The following schema describes the research strategy:

Objectives

The objectives of the field case studies are as follows:

1. to review recent experiences with resource mobilization strategies (user fees, insurance, etc.) in low income countries and the documented experiences to date;

2. to assess the overall impact on health care resources of each of the strategies adopted;

3. to assess the relative effect of each of the strategies on government and non-government sources of finance;

Table 8

Research Strategy

General Topics and Countries to be Selected	***Overall Assessment Criteria***	***Analysis of Specific Resource Mobilization Strategies***	***Output of Case Study Project***
Overall policy goal: Increasing money for the health sector Countries to be selected whose explicit policy objective is to increase finance for health	1. Was more raised for the health sector? 2. What was the effect on public and private expenditure? (levels and composition) 3. What was the contribution of different sources of funds and resource mobilization strategies to the total? 4. What was the effect on "public health" spending specifically?	1. Process (e.g. legal, implementation, and management issues) 2. Assessment (efficiency, equity, quality, revenue generation, sustainability)	Guidelines for countries/USAID for improving resource mobilization strategies and interventions.

4. to assess the effect on resources for public goods and primary health care services, if any;

5. to analyze the trade-offs in terms of different objectives, like efficiency, equity, quality, etc. and

6. to use the case studies to formulate a set of guidelines which can be used by national governments and USAID missions to support the design of policies to mobilize resources.

The key research questions that will be addressed through this project are:

1. What is the experience to date in implementation of different resource mobilization strategies?

2. What are the strengths and weaknesses of different strategies under different social and economic circumstances?

3. What is the impact of these strategies on revenue mobilization and sustainability of the health system?

4. What is the effect, if any, of these strategies on resources for public goods and primary health services?

5. What are the trade-offs in terms of different objectives (efficiency, equity, quality, etc.) of resource mobilization strategies?

6. What are the preconditions necessary for successful implementation?

7. What additional resources are needed to support this type of policy change? What are the training and managerial requirements for success?

8. What complementary policies are necessary for successful implementation? What aspects of the political environment can be seen as enabling factors, and which as potential obstacles to success?

Design of Studies

The study will be designed to focus on no more than three different resource mobilization strategies used by the host country. As can be seen from table 1 (page 5), tax revenues contribute most of the resources for the health sector in most countries. The contributions of user fees, social insurance and private insurance tend to be small in most countries. However, in view of the growing importance of these resource mobilization strategies, this study will concentrate on user charges, social insurance and private insurance.

The study design will develop specific methods to assess, among others,

1. performance criteria;

2. preconditions; and

3. the policy environment for each of these three resource mobilization strategies.

Performance criteria to be explored include:

- utilization levels and accessibility;
- quality of care;
- consumer satisfaction;
- net resource mobilization;
- efficiency; and
- effect on health system performance.

The necessary preconditions for successful implementation will specifically

address, among others,

- human resource needs;
- managerial skills; and
- system needs such as information systems, procurement, monitoring and evaluation.

The policy environment issue will explore the other features of economic and social conditions that contribute towards successful policy change. In the process of assessing performance criteria, preconditions, and the policy environment, the study will review and update all documented experience to date for the selected host country .

Each of these studies will use a case study format and will use both qualitative and quantitative data collection techniques. One qualitative technique that will be explored is the use of focus group discussions, which is designed to assemble a small group of participants with similar interests from interested and concerned parties for an informal discussion. Focus group techniques are especially useful in understanding implicit beliefs and value systems and the motives underlying stated responses and emphasize deep probing and spontaneous responses and is an efficient tool "for delineating perspectives, attitudes, and behaviors" (Attah and Plange, 1993). The use of focus group technique will be explored for examining issues of quality of care, consumer satisfaction, and equity in evaluating performance criteria. Focus group techniques may also be useful to assess human resource needs and system needs as well as to understand the social, political, and economic environment that contributes significantly to policy change.

Quantitative methods will be used to assess utilization levels, quality of care, net resource mobilization and efficiency issues of performance criteria, as well as to evaluate managerial skills. The main source of information will be secondary data as maintained by the government, the facilities, and groups and individuals.

The unit of analysis will be the economy as a whole. Wherever possible, time series data will also be collected so as to obtain a better understanding of intertemporal trends. Where such information is not available, only cross section data analysis will be done.

In accordance with HHRAA guidelines, the field work for these case studies will be undertaken in collaboration with research partners in the host countries.

Table 9

Study Design

	Qualitative Methods	***Quantitative Methods***
Study Variables	1. Quality of care	1. Utilization levels
	2. Consumer satisfaction	2. Accessibility
	3. Equity	3. Quality of care
	4. Human resource needs	4. Net resource mobilization
	5. System needs	5. Efficiency
	6. Policy environment	6. Impact on health system
		7. Managerial skills
Process of Analysis	1. Synthesizing and conceptualizing views	1. Descriptive techniques
	2. Identifying and interpreting consensus	2. Cross tabulation of variables
	3. Identifying and interpreting differences	3. Correlations and analysis of variance, where possible
	4. Synthesizing and identifying global themes and perspectives	4. Regression techniques, where possible
	5. Formulating recommendations relevant to program objectives	

Potential Host Countries

The primary criterion for selection of potential case study countries is that at least two of the main resource mobilization mechanisms be present at a national level. This criterion led to the exclusion of, for example, countries in which user fees had only been implemented in selected pilot districts.

The following list of candidate countries was assembled.

Measurement and Data Collection

The proposed research has three components: descriptive, evaluative, and programmatic. The descriptive component seeks to address five questions:

1. What strategies for resource mobilization have been adopted in the country being studied?

2. What were the objectives of these strategies?

3. How were these strategies designed and implemented?

4. What are the levels of human resources, managerial skills and systems support that are available in the health sector for the purposes of resource mobilization?

Africa	***Non-Africa***
Cote d'Ivoire	China
Ghana	Dominican Republic
Kenya (desk review)	Jamaica
Nigeria	Sri Lanka
Senegal	Thailand
Tanzania	Bolivia
Zaire	
Zambia	
Zimbabwe	

5. What factors contributed to success or failure of these strategies in achieving their objectives?

The evaluative component seeks to address five questions:

1. What are the effects of the different strategies on health care resources?

2. What are the effects of the different strategies on government and nongovernment sources of finance?

3. What are the effects of the different strategies on resources for public goods and primary health care services?

4. What are the effects of the different strategies on utilization levels and accessibility, quality of care and patient satisfaction, efficiency in allocation of resources, and equity?

5. What are the human resource and managerial requirements, and system needs such as information systems, for successful implementation of these strategies?

The programmatic component, which will evolve from the descriptive and evaluative studies, will develop a concrete set of guidelines which can be used to support efforts at policy change, and will address the questions:

1. What implementation strategies are most likely to be successful under

different circumstances?

2. What are the main implementation issues, in terms of necessary preconditions, sequencing, design, and complementary policy changes required to support successful policy change?

The descriptive and evaluative components will require different kinds of information and data for analysis. We discuss each of these in turn.

Description

Different countries have adopted different resource mobilization strategies, and a complete understanding of the strategy, its coverage, its objectives, etc. will be the first step of the study. These issues are summarized as follows:

1. What strategy/strategies for resource mobilization in the health sector is/ are being adopted in the country? These strategies will fall under the general categories of general tax revenues, specific taxes, user charges, social insurance, private insurance, and donor assistance.

2. Since when have these strategies been adopted?

3. What was the pattern of health care financing before implementation of these strategies?

4. What was the pattern of utilization of health services before implementation of these strategies?

5. What was the pattern of administrative staff allocation to different facilities before implementation of these strategies?

6. What are the main objectives of these strategies? These objectives will fall under the general categories of raising revenue, improving efficiency of allocation of resources, improving equity, fostering private sector development, improving sustainability, and improving quality of care and patient satisfaction.

Information useful to facilitate analysis will vary depending on the strategy adopted. (We note that not all the information required will be available everywhere).

User Charges

One of the focus areas of this study is to look at user fees in the context of other strategies for raising resources. In particular, the study will examine the revenue generation outcome to see if new results concerning the amount of resources raised are identified. This study will also focus on process and implementation

issues, and will examine the relationship of user charges with quality and efficiency. It will also focus on describing the relevant experiences and the realities of implementation at a national level.

Despite the vast existing literature on implementation of user fees, there appears to be much that is undocumented. This includes:

- trade-offs between revenue generation, equity and exemptions;
- links between fees and the referral system -- and whether hierarchical fee systems actual lead to changes in utilization patterns;
- other features linking the price structure and referral patterns -- such as the administrative structure, procedures for collection of fees, the level of retention at facility level;
- the relative merits of instituting bypass charges vs. graduated charges;
- targeting of exemptions and the links between exemptions and revenue raising;
- what is the most appropriate yardstick for measuring success at revenue generation through user fees (fee revenue as percent of total recurrent costs, non-salary recurrent costs, drug costs, etc.);
- other implementation issues - the trade-off between the detail of the price schedule and administrative cost; organization of fee collection and incentives/accountability (e.g. gate fee vs. department fee);
- user fees and incentives for insurance;
- adjustment of user fee levels: how to make regular increases to keep pace with inflation an administrative rather than a political process.

Information required on these issues is as detailed below:

1. What, in order of importance, are the objectives of user charges?
2. What is the target for cost recovery, if any? Is the target to recover all or part of operating or recurrent costs only? Or is the target to recover capital costs as well? Are user fees being charged only for outpatient services, or inpatient services, or drugs, or tests , or all?
3. How are user charges structured? These may be fee for service, flat fee, fee for episode, etc.
4. What are the specific fees for certain products and services? Is the fee-schedule on display, or easily available? These will include five to ten most common products and services.

5. How are these prices set? Prices may be fixed, or may be based on the market price of comparable products and services, based on the ability to pay, based on the costs of the products and services, etc.

6. Are these products and services being offered elsewhere? Is the quality comparable? Is the cost comparable?

7. What is the policy on exemptions and waivers? How is eligibility decided? How many waivers are allowed? What is the method of waiving used? How long are the waivers valid?

   Who has the authority to issue waivers? How are the waived services accounted for?

8. What is the system of management of user fees collection? Who collects fees? At what point are the fees collected? How much staff is involved in the process of fee-collection and management? What kind of forms/ schedules/log books/receipt books etc. are used? How is the collection at the end of the day reconciled with services provided? Where is the money kept? Is it deposited in a bank or the treasury? What kind of records and deposit slips are used? What is the process of audit of accounts? Who does the audit?

9. Is there any training program for staff involved in management of the fee-collection process? Is there any system of monitoring and evaluation?

10. How much revenue is collected? What is done with the revenue so collected? How much stays in the facility? How is the revenue that stays in the facility utilized?

11. What are the total costs of collection of user fees? How are these costs spread over staff salaries and wages, supplies, rents, utilities, etc.?

12. To what extent do fees affect utilization? Are fees structured to promote the referral system? To what extent does an hierarchical system of fees actually leads to changes in the utilization patterns?

Insurance

Different countries have different kinds of insurance systems in place. This study will look into administrative issues, such as the administrative costs of insurance and requirements for sustainability. It will also look at the impact of insurance on cost escalation, on resource allocation issues, on choice of technology and on access and equity, including the effect on the uninsured. The information required is listed below:

1. What kinds of insurance systems does the country have? How many funds are there? Who owns the pool of funds?

2. What are the target groups? These may include all population, formal sector employees, self employed persons, special groups, non-working population groups, etc.

3. Is membership compulsory or voluntary?

4. How are contributions to the pool determined?

5. What is the benefit package? What services are covered? These may include primary care services, specialist services, hospital, inpatient care, drugs, ancillary services (like lab tests), sight tests and spectacles, full or basic dental, transportation to and from the hospital, immunization, birth control, long term care, rehabilitation, etc.

6. What is the legal status of providers? What framework of rules has been developed to control providers' activities?

7. What are the methods for providing and receiving payment for health services? For instance, the patient has access to care without directly paying the provider, or the patient pays the provider and gets a refund from the insurance.

8. Are providers employees or contractors? What are the principle characteristics of provider payment systems? These may include fee for service, case payment, daily charge, flat rate, capitation fee, salary, etc.

9. What are the overall costs of running an insurance system? Costs may depend on who is covered, services covered, costs of different items of services, and the costs of administration. Administration costs may include the costs of managing the collection of finance, contracting for services and providing for services.

10. How is the social insurance system financed? Financing may include government subsidies and tax relief, contributions, copayments, user charges, consumer taxes, interests on reserves, etc.

11. What is the internal organizational structure of health funds? How many administrators are in position? What are their tasks? What does the head office do? What do the local offices do? How are the staff paid? What are the staff training and development practices?

12. What is the information system like? Is it computerized?

13. What is the system of financial management and accounting? What is the system of audit and review?

14. What are the legal issues related to health insurance? What specific new legislation, if any, was required?

The descriptive component also includes an understanding of the process by which the decision to implement the chosen resource strategy is arrived at. The description of this process will involve identification and understanding of the various players involved in the decision-making process, the players affected by the decisions made, the interlinkages between the various players, and the socio-political environment in which the decisions were made. Process issues may be summarized as follows:

1. What resource mobilization strategy or strategies were adopted? Who were directly affected by this decision? When was the decision to implement that strategy implemented? How big or small was the planned and the actual effect?

2. How does the proposed strategy affect the health system from financial and administrative perspective? Who will likely benefit the most? Lose the most? What is the likely symbolic consequences of acceptance of the strategy?

3. Who are the major players who participated in the decision-making process? What were the roles of international agencies, donor agencies, government, politicians, academic sector, community, hospital personnel, and the commercial sector?

4. Who all opposed the move? Who all supported the move? What reasons were given for supporting or opposing the move?

5. How are the units of the country's health system, like hospitals, health centers, health posts, etc., affected by the change? How are the individual employees affected? How are the patients affected?

6. What are the main organizations/institutions/individuals that the unit's management/employee unions is able to influence in obtaining favorable decisions? What form does this influence take? Is the influence strong?

7. How have the physician-patient relations and employer/employee relations changed because of the decision to implement a resource mobilization strategy?

The study will explore the possibility of using the tools of political mapping (Reich, 1994) to describe and explain the decision-making process.

Evaluation

The issue of measuring the effects of resource mobilization strategies is the key empirical question of this section. As discussed earlier, this study will focus on the impact on revenue mobilization, on the relative effect on government and nongovernment sources of revenue, and on the effect on resources for public goods and primary health care services. Other outcomes include the impact on efficiency, quality of care and patient satisfaction, public accountability, equity, etc. We discuss issues of measurement of each of these in turn.

Revenue Mobilization

Implementation of user fees and insurance systems can be expected to lead to improvements in net revenue mobilization. This can be evaluated by looking at the total revenues and the total costs of collection of these revenues. Total revenue figures can be obtained from central government records, provincial or state records, facility accounts, etc. Total costs include salaries and wages of revenue staff, supplies, training and supervision, accounts and bookkeeping, audits, and miscellaneous charges.

It will be useful to have data over time to assess the relative impact on government and nongovernment sources of revenue, and the effect on resources for public goods and primary health care services. Where such data (before and after implementation of a revenue mobilization strategy) is not available, cross-section data can be used and comparisons made with other comparable countries.

Efficiency

Implementation of user fees and insurance systems can be expected to lead to improvements in allocation of resources, better investment decisions, management control and improved quality. Improvements in allocation of resources can perhaps be best examined in a before/after study, where a comparison of allocation of resources can be made to assess the difference in the process. Where such data (before and after implementation of a revenue mobilization strategy) is not available, cross-section data can be used and comparisons made with other comparable countries.

Quality of Care and Patient Satisfaction

Measurement of quality of care can be organized along the Maxwell-Donabedian taxonomy of the dimensions of quality. This three-by-six classification gives eighteen “cells”, or cross-dimensions, where each cell gives information on two dimensions: where (structure, process, outcome) and what indicator of quality

(effectiveness, acceptability, efficiency, access, equity, relevance). Quality of care may be assessed by judging each cell against an established or tested norm, and progress in improving quality of care can be assessed by comparing the cells over time. (Table 7 is reproduced here as table 10 for ready reference).

It is possible that not all information will be available to fill in all the cells of the quality matrix. Many aspects of performance may not be well covered by the indicators currently in use. A comprehensive measure of quality may thus not be available; however, the advantage of the Maxwell-Donabedian classification is that information in each cell by itself offers a useful and functional measure of quality.

Greater Public Accountability

One of the possible gains from implementation of user fees and insurance is greater public accountability and greater community participation. When consumers pay for health services they are likely to be more sensitive to the kind of treatment they get at the health facilities. In many developing countries, structures exist at the district and village levels for facilitating community involvement and evaluating socio-economic and development activities. Community involvement and participation can be assessed by examining the frequency and records of meetings which these community bodies have with the hospital administration (Table 11). The more structured and organized these meetings are, better will be the record keeping and follow-up action taken.

Moreover, implementation of user fees and insurance is likely to lead to the development of appropriate financial reporting systems and accountability of the facility management vis-a-vis the central authority.

Equity

Equity may be measured by looking at the use of health facilities across income groups, gender, age, race, and diseases and conditions treated in these facilities. (Table 12)

Implementation

These case studies will be carried out in five countries, of which three will be in sub-Saharan Africa. In accordance with HHRAA guidelines, field work will be undertaken in collaboration with host-country research partners. Each study will involve at least three visits by DDM researchers. The first of these visits will be a preliminary visit to make an assessment of the field-situation, identify the available material, identify the key persons in health administration and the

Table 10

Quality of Care

	Structure	***Process***	***Outcome***
Effectiveness	facilities, equipment, administrative processes, qualifications of medical staff , etc.	clinical history, physical examination, diagnostic tests, technical competence, preventive management, continuity of care, etc.	patient recovery, restoration of function, survival, etc.
Acceptability	physical comforts, cleanliness, privacy, counseling, etc.	explanation of treatment, patient education, etc.	follow up for improvement, meetings, etc.
Efficiency	appropriate staffing and equipment levels, etc.	administration, organization, staffing, operational arrangements, etc.	comparison of costs for similar cases across different units and time periods
Access	location, etc.	capacity, etc.	treatment of wait-listed patients, etc.
Equity		bias in treatment, etc.	bias in outcomes, etc.
Relevance	usefulness of resources, need for specific services, etc.		impact on health status for different groups of people, etc.

government, identify potential research partners, and make an assessment of what can be achieved in the study. The field study will be conducted in second and third follow-up visits. This will include focus group discussions with the identified key personnel, an assessment of the process of implementation of resource mobilization strategies, an evaluation of the factors that affected this process, and an evaluation of the health system and the impact of these strategies.

A separate report will be prepared for each country study, and the results shared with the country and regional administrators, USAID country and regional missions, USAID central offices, and other interested researchers. The final report will be a synthesis and analysis of all the five case studies and the desk reviews.

Appendix: Review of Literature

Health Insurance

Country: Zaire

Researchers: La Forgia and Griffin (1993) based on Shepard, and Vian and Kleinau (1990), and Moens (1988)

Table 11

Measurement of Community Involvement and Reporting

Variable to Measure	*Issues*	*Sources*
Community Involvement in One Sample Area	1. What are the organized community groups active in the area?	Focus group discussions with health administrators, facility administration and with leaders of the community groups
	2. Have these groups expressed any desire to meet with the health administrators?	
	3. Have the health administrators expressed any desire to meet with the community groups?	
	4. How frequently are these meetings held?	
	5. Are records of these meetings kept?	
	6. Is any follow-up action taken after these meetings?	
	7. How have the goals and objectives changed because of community participation?	
Reporting System	1. What kind of reports are the facilities required to file with the government?	
	2. How frequently are these reports filed?	
	3. How frequently do the representatives of government meet with the facility administration?	
	4. What follow-up action is taken on the basis of this reporting system?	

Table 12

Measurement of Hospital Utilization

Variable to Measure	*Issues*	*Sources*
Hospital Utilization Across Income, Gender, Age, Race, and Diseases and Conditions	1. Patient Profile (Outpatient and Inpatient) Regarding Utilization Across Income, Gender, Age, and Race 2. Profile of Patients According to Diseases and Conditions	Hospital Records

Focus of Study: A study of community health insurance schemes in rural Zaire. Addresses concerns about access to health services, and considers the feasibility of financing health services through community insurance.

Major Findings: Community insurance plans have achieved high levels of enrollment resulting from affordable premiums, acceptable perceived quality of care, efficient administration, and efforts to increase community education and involvement. Some evidence of moral hazard exists, but overall the plans have successfully achieved a positive financial balance. Persistent concerns include access to health services by indigenous groups.

Country: Thailand

Researchers: La Forgia and Griffin (1993) based on Myers (1987), and Adeyi (1989), and Wilbulpol-prasert (1991)

Focus of Study: The study focuses on health card funds as one mechanism used to fund primary health services in Thailand. Looks at management of the funds, the ability of the program to raise revenue, and equity implications of the program.

Major Findings: The study finds some evidence of moral hazard as well as adverse selection in the purchase and use of health card funds.

Country: Guineau Bissau

Researchers: La Forgia and Griffin (1993) based on Eklund and Staven (1990), and Chabot, and Boal, and Da Silva (1991)

Focus of Study: The study focuses on collective funds which are used to finance village health posts. Examines the financial and institutional sustainability of these funds. Funding from the scheme is used primarily to purchase drugs at a subsidized rate from the government.

Major Findings: Revenues cover only 20% of total expenditures in the village health posts, and 29% of drug expenditure. Required drugs are often out of stock.

Country: Zaire

Researchers: Shepard, and Vian, and Kleinau, 1990

Focus of Study: A study of the design, management, and operational efficiency of four health insurance programs in rural and urban areas within Zaire. Considers the effects on demand and financial sustainability of health insurance schemes.

Major Findings: The study finds that decentralized, local health insurance schemes are financially and managerially sustainable. A national health insurance plan is not recommended. Evidence suggests the presence of moral hazard and adverse selection within the local insurance schemes.

Country: Gabon

Researchers: Social Security Department International Labor Office, 1993

Focus of Study: The study focuses on two social security funds presently operating in Gabon: the National Social Security Fund (NSSF) and the Social Protection Fund (SPF). Discusses quality of care and cost recovery.

Major Findings: The study finds that quality of care is considered good in NSSF facilities, where enrollees from both insurance schemes receive care. Hospital costs are high, exceeding revenues from user charges. Overall expenditure for health insurance is considered too high when compared to expenditures of other NSSF branches.

Country: Costa Rica

Researchers: La Forgia and Griffin (1993)

Focus of Study: The focus of the study is on the expansion of social security benefits in Costa Rica resulting from the integration of the Health Ministry (MS) and Social Security (CCSS) in the 1970s. Discusses institutional and financial sustainability, as well as perceived quality of care. Addresses concerns about access to health services by indigent populations.

Major Findings: Groups covered by CCSS include agricultural workers, self-employed, pensioners, and domestic servants. In 1990, this included nearly 85% of the population. Despite high levels of coverage, patient satisfaction with service provision is low. Institutional problems include poor medical care organization, congestion, depersonalized attention, absenteeism, and low staff morale. There is evidence of moral hazard with regard to the use of medications,

diagnostic tests, and referrals to specialized services. Incentives exist for physicians to recruit patients to evening clinics.

Country: Zaire

Researchers: Moens and Carrin, 1992

Focus of Study: The study evaluates the prepayment method of financing hospital services in the Bwamanda health zone. Addresses willingness to enroll in the scheme and cost recovery.

Major Findings: The study finds that the prepayment method of financing hospital services is valued by the community in Bwamanda. Membership increased from 30,000 in 1986 to 80,000 in 1988. Moreover, cost recovery has more than doubled since the plan's inception in 1986. The study recommends the possibility of expanding the prepayment plan to primary health care centers in Bwamanda.

Country: Romania

Researchers: Mihai-Constantin, and Erhan, 1992

Focus of Study: The study offers a review of proposals to reform Romania's health system, including the establishment of a social safety network. Proposed reforms aim to improve targeting and resource utilization.

Major Findings: The study finds that a social safety network and the development of a special infrastructure to set standards and assure quality of care will be included among other changes in the health system. The government will finance the social safety network through general revenues and earmarked taxes. Copayments by patients will be required.

Country: Lithuania

Researchers: Dalia and Peciuliene, 1992

Focus of Study: The study reviews recommended reforms of Romania's health system, including the implementation of mandatory health insurance and user fees.

Major Findings: The study finds that the purpose of the proposed health insurance law is to regulate the order of obligatory health insurance. Supplemental health insurance will be offered. The proposed health budget will be financed through a combination of insurance premiums, user-fees, and charity contributions.

Country: Czech Republic

Researchers: Dolezalova, 1992

Focus of Study: The study reviews efforts made to reform the health system in the Czech Republic paralleled by the political movement towards democracy. Considers reform strategies in light of chronic underfunding and poor health status of citizens.

Major Findings: The mandatory national health insurance scheme, first proposed in 1992 is expected to cover costs of basic care and screening tests, ambulatory care, drugs, ambulance transport, and spa treatments. However, standards for defining basic care are needed. Services beyond these needs will be financed through other means such as private insurance or out of pocket expenditures.

Country: Hungary

Researchers: Nagy, and Ladanyi, 1992

Focus of Study: The study reviews efforts made to reform the health system in Hungary.

Major Findings: Compulsory health insurance is part of the new health system. Enrollees include employees, private enterprises paying contributions, dependent family members, and pensioners. Contributions from employed persons help to cover costs of those who are unemployed. Copayments are required for some services, and medications are provided at a subsidized rate. Health care beyond the scope of basic services is financed either out of pocket or by supplemental insurance.

Country: Philippines

Researchers: La Forgia and Griffin (1993)

Focus of Study: The study examines Medicare in the Philippines, which is a statutory social insurance health program covering civil servants and formal sector workers in private firms. Discusses coverage, benefits, costs, and financing.

Major Findings: Nearly 38% of the population in 1990 was covered under one of the two Medicare programs, while expenditure accounted for only 3% of total health care expenditure in the Philippines. Payroll taxes are the main source of revenue, and coinsurance rates are high. Expenditure ceilings have been imposed to discourage induced demand resulting from fee-for-service compensation. Benefits under Medicare include inpatient services only.

Country: Mexico

Researchers: La Forgia and Griffin (1993) based on Sherraden (1989, 1991, 1992) and Mesa-Lago (1992).

Focus of Study: The study considers the expansion of social security benefits to underserved and impoverished areas of rural Mexico through a program called IMS-COPLAMAR in 1979. Examines the extent of coverage and financial sustainability.

Major Findings: The IMS-COPLAMAR program covered 50% of the population, or 10 million persons in 1988. Per capita expenditures are lower than for other health insurance schemes, and communities are responsible for land, labor, and maintenance of the health facilities. Absenteeism among workers is uncommon due in part to isolated locations and constant supervision by both administration and the community. High personnel turnover is a problem. Incidence of infectious diseases has decreased in the communities covered by IMS-COPLAMAR.

Country: Korea

Researchers: La Forgia and Griffin (1993)

Focus of Study: A study of national health insurance in Korea. Discusses the effects on access for low income groups, and the financial and institutional sustainability of the program.

Major Findings: While universal health insurance coverage has been achieved in Korea, inequities in access to health services along geographical, utilization, and financial boundaries remain. There is evidence of moral hazard in utilization of health services Moreover, coinsurance rates are among the highest in the world. Costs escalated at a rate double that of inflation in 1980s.

Country: Egypt

Researchers: Social Security Department International Labor Office, 1993

Focus of Study: The study evaluates the Health Insurance Organization, a social security type of insurance in Egypt. Focuses on cost recovery.

Major Findings: The balancing of HIO's budget is dependent on the intervention of the Employment Injury Fund. While the number of enrollees in HIA is growing, premiums are modest and employers are reluctant to contribute more that the current 4% of income per employee. One third of HIO's budget is spent on salaries and costs, while two thirds is contributed towards recurrent costs such as treatment at HIO facilities. Some financial reserves are available in case of emergencies.

Major Findings: The insurance scheme covers approximately 4,600,000 persons. Beneficiaries include civil servants and private sector workers. Sources of financing include contributions made by employers and employees.

Country: China

Researchers: La Forgia and Griffin (1993)

Focus of Study: The study examines five insurance schemes which cover approximately one quarter of China's population. These include Government Employee Insurance (GEIS), Labor Insurance (LIS), private insurance plans , Collective Insurance (CIS), and Rural Cooperative Insurance (RCIS).

Major Findings: Per capita spending has risen for the five schemes as a result of reimbursement policies and the absence of coinsurance rates. High technology use in hospitals may be the result of government pricing, and is a source of cost escalation. Emphasis on health care finance in China since the 1980s has moved away from collective insurance towards private self financing through user fees and out of pocket spending by individuals.

Country: Guinea Bissau

Researchers: Eklund and Staven, 1990

Focus of Study: Study considers financial sustainability of community insurance schemes. Addresses concerns of access to health facilities by rural populations in Guinea Bissau.

Major Findings: The study finds that a simple prepayment scheme whose benefits include free or reduced health care in the event of illness best addresses the needs of rural populations in Guinea Bissau. Advantages include improvements in quality of care, retention of revenue at local facilities, and greater availability of drugs. Adverse selection is controlled in part by community involvement.

Country: Bulgaria

Researchers: Drebov, Marinov, 1992

Focus of Study: The study considers health care reform in Bulgaria in light of its political and economic changes.

Major Findings: The study recommends health insurance schemes as a method of financing health services in Bulgaria. Expected benefits include additional funds, stability in financing, clearer identification of health care costs and improved accountability through the separation of financer and provider.

Country: Kenya

Researchers: La Forgia and Griffin (1993)

Focus of Study: Study examines the National Hospital Insurance Fund (NHIF), which is a statutory scheme covering inpatient care. Discusses benefits, coverage, financing, and costs.

Major Findings: The scheme covers mainly salaried workers and their families, and excludes persons over 65. Majority of inpatient services in approved hospitals and nursing and maternity homes are covered under the scheme. The fund is financed through a payroll tax assessed according to enrollees income. No copayments are charged, but reimbursement to providers is generally insufficient to cover all costs.

Country: Uruguay

Researchers: La Forgia and Griffin (1993) based on Mesa-Lago (1992) and Meerhoff and Rigoli (1992)

Focus of Study: The study considers private institutions called Instituciones de Asistencia Medica Colectiva (IAMC) through which social security in Uruguay provides health services. Discusses the structure of IAMC's.

Major Findings: Nearly 40% of persons who have access to IAMC services are covered under social security, and the majority of the remaining persons enroll voluntarily, paying a premium. Enrollees are concentrated in the capital city of Uruguay, Montevideo.

Country: Dominican Republic

Researchers: a Forgia and Griffin (1990)

Focus of Study: The study examines an HMO insurance scheme (SEMMA), providing coverage to primary and secondary school teachers. Discusses enrollment, benefits. and financial sustainability of the program.

Major Findings: SEMMA's enrollment in 1990 was over 103,000, including teachers, dependents, and retirees. Benefits include a package of outpatient and inpatient services. Providers compete for contracts with SEMMA. Contracts with SEMMA are attractive because of high enrollment, unsuccessful cost containment efforts have dissuaded some providers. Perceived quality of care by members in general is high.

Country: Philippines

Researchers: La Forgia and Griffin (1993)

Focus of Study: The study is concerned with the Philippine Medicare-HMO tie-up which is an experimental program seeking to extend Medicare benefits to include outpatient services in the Philippines. Considers enrollment, financing, and perceived quality of care.

Major Findings: Nearly 2.2 million, or 80% of Medicare members residing in Manila have enrolled in the tie-up since its inception. Evidence suggests that perceived quality of care is good. Costs are contained through various policies

including required authorization for hospitalization as well as diagnostic tests. Profitability results from low utilization rates, a young membership and the transfer of catastrophic coverage to the regular Medicare scheme.

Private Health Insurance

Country: Kenya

Researchers: Mwabu, and Wang'ombe, and Ikiara, and Manundu, and Kiugu, 1993

Focus of Study: The study examines different health insurance schemes in Kenya from the perspective of a competitive market model.

Major Findings: At the time of the study, there were 38 registered insurance companies in Kenya offering insurance against several types of risk. These include marine, motor vehicle, life, public liability, personal accidents, and fire risks. Only five of the 23 companies in the survey offered medical insurance schemes as pure insurance packages. The existence of approximately 3,000 brokers and agents introduces a strong competitive element in the insurance market. There is potential for the spread of health insurance to people working in the informal, unregistered establishments. The National Hospital Insurance Fund is considered to play a major role in the financing of medical services in Kenya.

Country: Fiji

Researchers: McFarland, 1993

Focus of Study: The study evaluates the role of health insurance as a method of financing health services in Fiji.

Major Findings: No comprehensive social insurance program currently exists in Fiji. Two private insurance schemes, Blue Shield Insurance Ltd. and Queensland Limited, offer basic catastrophic coverage. Premiums and benefits are similar in both schemes, and both insurers offer some form of profit sharing to enrollees. Premiums are paid entirely by employees. Benefits include daily hospital charges and fees for outpatient hospital services. Since fees in Fiji are largely nominal, insurance is used primarily to cover the cost of medical treatment overseas. Combined enrollment for the two insurance schemes is nearly one seventh of Fiji's population. The Insurance Welfare Society provides a national umbrella for various groups participating in existing group health plans. The Public Service Commission is the largest participatory group in the society.

User Fees

Country: Zimbabwe

Researchers: Hecht, and Overbolt, and Hopkins, 1993

Focus of Study: The study identifies and addresses difficulties encountered by the Ministry of Health in reforming and revising existing user fee structures, and its billing and collection procedures.

Major Findings: Suggestions for revenue gains include an increased ratio of collection to billing, implementing full cost pricing for drugs , separate charges for professional services offered by doctors, and more rigorous classification of patients according to income level and timely and complete billing. Efficiency gains may be made through decentralization of authority and universal invoicing.

Country: Ghana

Researchers: Waddington and Enyimayew, 1990

Focus of Study: This study examines the effects of increasing government health service charges in Ghana in 1983 and 1985.

Major Findings: Finds that utilization in rural areas was affected drastically while the effect on urban utilization was less extreme. Reduced utilization freed up staff time. Age composition of users changed in favor of the young. People became more concerned about quality of care and behavior of medical staff. The study found that many facilities did not spend their entitlement of revenue.

Country: Lesotho

Researchers: Matji, Ts'Oene, Spencer, and Gertler, Byrne 1985

Focus of Study: The study analyzes the effects of an increase in user fees on health utilization patterns in Lesotho. User fees were increased in order to raise revenues, rationalize the referral system, and revitalize the private sector by inducing demand for private health care provision.

Major Findings: The study finds that increased user fees reduced utilization, and made no improvements in the referral system. The study recommends cautious use of service statistics in the absence of other relevant data. This information includes changes in perceived quality of care, and external factors (such as drought). Qualitative measures are emphasized.

Country: Kenya

Researchers: Mwabu, and Ainsworth, and Nyamete 1995

Focus of Study: A study of the effects on utilization of several factors including

general availability of drugs, availability of prescription drugs, existence of user fees, distance to the provider, and income, and gender.

Major Findings: The study finds that demand for health services is positively correlated to the availability of drugs, nearness to the health facility, and income, and negatively correlated to user fees, and scarcity of prescription drugs. User fees were found influence demand more than distance to the provider. Gender has no effect on the demand for health services. The study highlights the importance of selecting exogenous indicators of service quality for demand analysis.

Country: Senegal

Researchers: Bitran and Brewster, 1994

Study of costs, quality of care, financing, utilization, and pricing of health services in Senegal.

Focus of Study: The study finds that 8% of total hospital funding is derived from user fees, and 84% from government revenues.

Major Findings: Most user-fees came from dental care, deliveries, hospitals, x-rays and laboratory exams, and in at least one facility, from surgery as well. Health centers raised 10% of revenues from user fees, and 86% from the Government. The majority of user-fees paid for deliveries, hospitalization, and curative care, while only a small amount went into preventive care and vaccinations. For health posts, user -fees contributed 28% of expenditure, while the government financed 60%. Most of the expenditure by health posts went to curative care. User-fees in health huts accounted for 87% of recurrent costs, with most charges going to consultation and delivery of drug costs. Total cost recovery percentages were 61% for hospitals, 114% for health centers, 179% for health posts, and 261% for health huts.

Country: Ghana

Researchers: Lavy and Germain 1995

Focus of Study: Study of the effectiveness of user fees in raising revenues and on changes in the quality of care.

Major Findings: User fees discourage use of health facilities, but improvements in quality of care resulting from additional revenue offset this effect.

Country: Cameroon

Researchers: Litvack and Bodart, 1993

Focus of Study: The study focuses the effects of user fees and improvements in

the quality of are on utilization of health services. Addresses concerns over access to health services by indigenous persons.

Major Findings: Utilization of health services increases with user fees if accompanied by improved quality of care. Contrary to previous findings, the study finds that probability of the most indigent population seeking care in the presence of user fees and improved quality increases at a rate faster than the rest of the population.

Country: Poland

Researchers: Golinowska, and Zbonikowski, and Wlodarczyk, 1992

Focus of Study: The study offers a synthesis of the most recent proposals for a reform of Poland's health system.

Major Findings: Reforms are expected to include the establishment of a national, compulsory Health Insurance Plan. The insurance scheme will be financed by premiums, public subsidies, and voluntary donations and contributions. All operating expenses are expected to be covered by premiums, while major investments and equipment will be financed by state subsidies. Supplemental insurance will also be available.

Country: Chad

Researchers: Carrin, and Autier Djouater, and Vereecke, 1992

Focus of Study: The study examines the feasibility of self financing pharmaceutical through direct payments in low income countries, and is based on a pilot project in Fianga, Chad. Addresses pricing methods, prescribing of drugs, equity, efficiency, and the capacity to pay for health care along income divisions.

Major Findings: The study finds that self financing pharmaceutical are a feasible option in low income countries. Several preconditions need to be met. These include some purchasing power by the served population, the selection of cost-effective drug treatments, and the presence of administrative skills. Direct payment of drugs is the method of financing in Fianga, and no difficulties of collecting payments were observed. Equity concerns need to be addressed, however, and the effects of the payment system on the health of persons across socio-economic divisions could not be assessed.

Country: Rwanda

Researchers: Shepard, and Carrin, and Nyandagazi, 1992

Focus of Study: The study considers the possibility of increasing user -fees as a method of financing health services and drugs in Rwanda. Discusses financial sustainability, efficiency, and effects on utilization.

Major Findings: The study finds that higher user-fees are expected to have a modest effect on utilization of health services. No affordability problems are foreseen. User fees are expected to have positive effects on equity. Other potential benefits include improvements in efficiency and quality of services. With regard to drugs, for instance, user-fees will remove rationing, leading to improved quality.

Country: Mali

Researchers: Carrin, and Kegels, and Konate, and Reveillon, and Vereecke, 1992

Focus of Study: The study focuses on the health system in western Mali, which includes user-fees and charges for outpatient drugs as methods of financing health services. Addresses concerns over equity, ability and willingness to pay, as well as financial and institutional sustainability. Compares results from a population-based survey and a health-center-based survey.

Major Findings: The study finds that the average ability to pay for health services is larger among users of health services than that of the average person in the population. Availability of drugs is a problem, and the system is characterized by poor operational efficiency. The study recommends the adoption of an essential drugs policy and improvements in the management of drug supplies..

Country: Senegal

Researchers: Carrin, Jancloes, Jeannee, Guindo, Ndiaye, Reveillon, Stroobant, 1992

Focus of Study: The study evaluates the fee-for-service structure of financing health services as part of the Pikine Project in urban Senegal. The project is unusual in its adoption of a community financing scheme in an urban area. Discusses efficiency and equity implications.

Major Findings: The study notes several problems with the project including administrative and economic inefficiency. Limited information is available about utilization across socio-economic divisions.

Country: Swaziland

Researchers: Yoder, 1989

Focus of Study: A discussion of the effects of increases in user-fees on utilization of preventive and curative health services, and on utilization across income groups.

Major Findings: Finds a decrease in average attendance at government health facilities by 32.4%, and an increase at mission facilities by 10.2%. Visits intended for protection against childhood diseases decreased by 16%, BCG and DPT immunization visits declined by 19%, and visits against dehydration in children decreased by 24%. Up to 34% of the overall decline represented those who paid the least for health services prior to the increase in user-fees.

Country: Bangladesh

Researchers: Stanton and Clemens, 1989

Focus of Study: The study examines the possible impact of user-fees in Bangladesh.

Major Findings: The study finds that the government health care system provides health to the poor and to the women. The study provides evidence that the imposition of user fees may seriously interfere with utilization of services by this group.

Country: Indonesia

Researchers: Chernichovsky and Meesook, 1986

Focus of Study: The study examines health service utilization patterns across socio-economic divisions.

Major Findings: The study finds that low household income is an obstacle to the utilization of modern health services, even when publicly provided. Higher income leads to the use of higher trained practitioners and physicians. Public facilities are preferred to indigenous practitioners.

Country: Sudan

Researchers: Griffin (1988) based on Bekele and Lewis, 1986

Focus of Study: The study evaluates the use of user-fees as a method of financing hospital services, evening clinics, and pharmaceutical in Sudan.

Major Findings: Advantages from user-fees include improved quality of health services, increased availability of pharmaceutical, additional earnings for physicians willing to work extra hours, improved patient responsiveness, and the physical improvement of some facilities.

Country: Brazil

Researchers: Griffin (1988) based on Lassner and Hanff, and Bon, and Smarzano, and Claudio de Souza Benguigui, 1986

Focus of Study: Discusses the effects on utilization and revenue generation of the imposition of user fees by a private non-profit provider of health services in low-income areas of Brazil.

Major Findings: Revenues during the first year covered from 2% to 20 % of direct costs. Six of eight service sites found no changes in service use by women, to whom the majority of fees were relevant. Where charges were imposed on services for children, in four communities, the proportion of children using the services appeared to increase.

Country: Benin

Researchers: Griffin (1988) based on Alihonou, and Miller, and Gandaho, 1987

Focus of Study: The study focuses on the Pahou health project in rural Benin, where drug sales are used to finance drugs, supplies, transportation costs of supervisors, maintenance costs of the health center, and remuneration of workers.

Major Findings: The study finds that the Pahou health project is not financially sustainable unless project directors and decision-makers have flexibility with regard to setting fees and salaries Suggests that services included under the plan be restricted to curative care.

Country: Rwanda

Researchers: Griffin (1988) based on Shepard, and Carrin, and Nyandagazi, 1987

Focus of Study: The study focuses on the different effects of charging user-fees between mission facilities (where fees are set unrestricted by government regulation, and revenues are retained by the facility), and government facilities (where the setting of fees is subject to a fee schedule, and revenues are given to the local government). Discusses cost recovery and willingness to pay for health services.

Major Findings: Fees in missions were typically twice as much as those in government facilities. Revenues from user fees accounted for 32% of mission expenditure, and 20% of government expenditure. No statistically significant effect of income or wealth on utilization of health services was observed.

Country: Zaire

Researchers: Griffin (1988) based on Bitran, and Mpese, and Bavugabgose, and Kasonga, and Nsuka, and Vian, and Wanbenge (1986), and Dikassa, and Baer, and Mpese, and Batwachen-gane, and Greenberger, and Pipp (1986)

Focus of Study: The study discusses and evaluates health zone financing in Zaire. The health zones are characterized financial and administrative autonomy. Zones are permitted use of any means to recover costs, and retain all revenues. Discusses pricing and financial sustainability.

Major Findings: The study finds that prices vary with facility ownership. Three basic types of outpatient charges include registration, examination, an drugs. Sliding fee scales are in place in most zones, which adjust for ability to pay. Cost recovery was least successful in hospitals. Possible explanations include less incentives to recover costs because of better access to government or mission subsidies, and difficulties in collecting large inpatient bills as opposed to smaller outpatient fees.

Country: Central African Republic

Researchers: Ministry of Public Health and Social Affairs, 1992

Focus of Study: The study discusses and evaluates various attempts at cost recovery in the Central African Republic.

Major Findings: Major expenditures for private facilities include drugs and salaries. Central facilities recovered 30% of expenditures through self financing, while urban government maternities recovered over 80% of expenditures. Prefectural hospitals had the poorest performance in terms of recovering operating costs, and provincial health centers varied greatly in terms of cost recovery. Outpatient consultations, surgery, hospitalizations, and diagnostic exams are services for which fees are most often collected. Fees are less frequently collected from medical certificates, drug sales, and deliveries. The development of a method to identify those who are unable to pay for health services is recommended.

Country: Fiji

Researchers: Wong and Govind, 1992

Focus of Study: The study examines the existing cost recovery system in Fiji's health sector. Evaluates costs and fee structures at government hospitals, and suggests potential reforms.

Major Findings: While general tax revenues finance the majority of health services in Fiji, a limited number of user-fees are in place. Fees may be charged for inpatient services as well as dental care. A system of community pharmacies is supported by community funds to alleviate problems of drug shortages. Revenues from user fees represents 2% of total health expenditures. The study suggests that possible options for health sector reform include charging fees only at hospitals, charging all inclusive fees as opposed to charging for individual services, charging scaled fees to account for income differences and ability to pay, and charging so as to encourage use of lower level facilities where appropriate.

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